

THE REVELATIONS OF RADIUM. From The Edinburgh Review.

3100



Entered as Second Class Mail Matter.

Press of J. J. Arakelyan, Boston, Mass.

A WEEKLY
MAGAZINE

The Independent

The Independent is made for thoughtful people, and contains 60 pages of reading matter, with occasional illustrations, divided into four main departments in which **EVERYTHING** of importance in the whole world is treated.

THE SURVEY OF THE WORLD—A luminous and strictly unbiased account of the important events of the week told in brief paragraphs.

EDITORIALS—THE INDEPENDENT's interpretation of these events, discussed positively and fearlessly in every field of thought—Sociology, Religion, Art, Literature, Science, Ethics, Politics, etc.

SIGNED ARTICLES—By the leading authorities in the world. "THE INDEPENDENT prints more articles from the ablest writers than any other paper in the United States."

BOOK REVIEWS—All the important books published in the English language reviewed by critics of authority who cannot be deceived by what is faulty or trivial. A helpful guide to the book lover and book buyer.

See Advertisement in Daily Papers for Weekly Contents.

\$2.00 a Year. 10 Cents a Copy.

SPECIAL OFFER: *Send 25 cents for trial subscription of eight consecutive weeks to Room 72
The Independent, New York, N. Y.*

THE LIVING AGE:

A Weekly Magazine of Contemporary Literature and Thought.

(FOUNDED BY E. LITTELL IN 1844.)

SEVENTH SERIES
VOLUME XXI.

NO. 3100. DEC. 5, 1903.

FROM BEGINNING
Vol. COXXXIX.

THE REVELATIONS OF RADIUM.*

"No man can split an atom," Dalton laid down as an axiom. Yet it has come to pass that the centenary of Dalton's atomic theory has been celebrated in scientific atmosphere dim with the flying *débris* of his fundamental entities. It may, then, sound like a paradox to assert that the theory in question has not been superseded; such, nevertheless, is the fact. Supplemented it has been; supplemented very largely by truths of a different order from those accessible to the most sagacious among the subjects of King George; but, so far, not superseded. The nature of matter presents an enigma that has perplexed thinkers during some thousands of past years, yet seems no nearer to a definitive solution than in the days of Anaxagoras. Immediate and palpable though the facts of substantial existence appear, they have none the less a baffling knack of evading our mental grasp, and dissolving away

into inapprehensible subtleties. One clear issue, however, has, from of old, been discernible amid their confusion; and our attitude towards the external world depends mainly upon how we face it. Is matter granular or homogeneous? Is it divisible to a certain point, and no further, or can it ideally be broken up *ad infinitum*, no structural unit being ever reached?

A prompt answer is supplied by the "common sense of most." Continuous matter is matter devoid of tangible properties. It sinks, in the last resort, into a metaphysical abstraction. Its characterization begins and ends with the statement that it possesses "extension," a quality belonging as well to empty space. The alternative hypothesis, that all bodies are made up of finite parts, is obviously more consonant with experience. It includes possibilities of accommodation, and fits in, on the whole, admirably with the

*V. 1. Presidential Address to the British Association for the Advancement of Science. By Sir Arthur W. Rucker, LL.D. Glasgow: 1901.

2. The Atomic Theory (The Wilde Lecture). By Professor F. W. Clarke, D.Sc. Memoirs of the Manchester Literary and Philosophical Society, 1903.

3. The Cause and Nature of Radio-activity. By E. Rutherford and F. Soddy. "Philosophical

Magazine," September and November, 1902.

4. Die radioactiven Stoffe. Von Dr. Karl Hofmann. Leipzig: Barth, 1903.

5. On the Spectrum of the Spontaneous Luminous Radiation of Radium at Ordinary Temperatures. By Sir William Huggins, K.C.B., and Lady Huggins. "Proceedings of the Royal Society," vol. lxxii., 1903.

varied exigencies of observation. Acquaintance with the nature and behavior of gases has left little, if any, doubt that they are composed of moving particles, the speed of which can be augmented by the application of heat; and between the three states of matter no sharp line of demarcation can be drawn. The facts of diffusion are, indeed, alone sufficient to demonstrate a granular composition alike for gases, liquids, and solids. The spontaneous interpenetration of different substances can only take place through the agency of active corpuscles, more or less free to perform independent excursions. Not even metals are strictly confined within the surfaces that apparently limit them. Lead allowed to remain long in close contact with gold becomes slowly and slightly auriferous near the place of junction; and the effect is reciprocal. This kind of mutual permeability of substances is universal, and testifies to an extension of their internal activity beyond their visible boundaries. The evaporation of water is a familiar example, inexplicable on any other supposition than that of the escape, one by one, of particles self-emancipated by the vigor of their jostlings from the constraint imposed by the company of their fellows, and thus set free to become individually vagrant. On all sides we indeed meet with sub-sensible operations that are unthinkable except in terms of an atomic hypothesis.

This assumed at first a crude form because the observations to be satisfied were superficial. Newton himself rested content with the "solid singleness" of the Lucretian indivisibles. Matter in grain, as he appears to have conceived it, possessed, it might be said, all the qualities of matter in bulk, only in a transcendent degree. Its units were "massy, hard, and impenetrable;"

they might be "of different densities and forces;" they could not but be of sundry sorts and sizes; and they were vaguely and indeterminately mobile. Beyond the Newtonian stand-point no sure advance was made until John Dalton slowly began to plod onwards into the unknown. His mind, in Sir Henry Roscoe's phrase, "was of a corpuscular turn."¹ He literally thought in three dimensions, instinctively forming solid mental diagrams of the subjects under his contemplation. A Quaker school-master from Cockermouth, he enjoyed neither privileges of leisure nor opportunities for learning; yet because of his clear plain sense, and dogged inability to loose his grip of a problem until it had yielded to the strong reducing power of his mind, he effected the establishment, on a rock-basis, of modern chemistry.

The idea that the ultimate particles of different kinds of matter have definite and distinctive weights presented itself to him in the course of an attentive study of gaseous absorption by water, and was verified through chemical considerations.² Dalton was indeed a "natural philosopher" by predilection, a chemist incidentally, although the lion's share of the spoils of his victory fell to the science of his second choice. The discovery was not of a nature to dazzle contemporaries; but it fructified for posterity. The classification of the elements, the theories of "valency" and "substitution," the rationalization of the anomaly of "isomers," bodies of dissimilar qualities though identical composition, the new and spacious department of "stereochemistry," in which formulæ receive a cubical interpretation, have all arisen out of a little table presented by Dalton to the Philosophical Society of Manchester, October 21, 1803. It gave the weights, relative to hydrogen, of the

¹ John Dalton and the Rise of Modern Chemistry, p. 104.

² Roscoe and Harden. "A New View of the Origin of Dalton's Atomic Theory," 1896.

"ultimate particles" of twenty-one substances, solid and gaseous indiscriminately, elementary and compound. Inaccurate as they were, and rudely determined, their enumeration opened a new era in the science of differentiated matter. Moreover, Dalton was justified in describing the inquiry as "entirely new;" for though there had not been wanting vague gropings in that direction, they lacked, to give them real significance, the synthetic touch finally added.

This consisted in the effective correlation of atomic weights with combining proportions. It had been assumed, *ab antiquo*, that various kinds of atoms differed in mass: it became obvious, through the use of the balance, that chemical compounds were made by a precise and unalterable recipe; yet only Dalton thought of causally connecting the two sets of facts. He stated categorically that the coalescence of the elements takes place atom by atom; hence, that it must take place between proportionate quantities, or equivalents, fixed by the relative weights of the individually combining parts. And it is actually found that each separate substance has a combining number of its own, which represents the weight of its ultimate particles on some suitable scale. This combining number is a property inseparable from the element it characterizes. It is rigidly constant; varieties of compounds can be formed only by its multiplication. That is to say, the same species of matter may unite in various proportions, as the degrees of metallic oxidation suffice to show; but it is always by the doubling, trebling, or quadrupling of an identical measure; between the well-marked steps of "multiple proportion" there are no intermediate gradations. A fractured atom—if the paradox be capable of realization—is devoid of chemical status; it has no combining value.

We must here remind our readers of a distinction sometimes ignored or obscured, to the great detriment of clearness of thought and exposition. We mean that between atoms and molecules. An atom is the chemical unit; a molecule is the physical unit. It is the smallest quantity of any given substance in which its characteristic qualities can inhere. Usually a group of atoms, it splits up, and reforms on a fresh basis, under the stress of chemical affinity. Naturally, then, atoms are the exclusive appanage of elementary forms of matter. Compounds are necessarily made up of molecules. There are, for instance, no such things as water-atoms. Water, reduced to atoms, consists of oxygen and hydrogen.

Dalton's achievement well deserves commemoration in the twentieth century. Atomic weights are among the most significant of natural constants. They fall into series, the substances composing which are related in such a way that homologous members are analogous as regards physical properties. It would almost seem—Professor Emerson Reynolds has lately pointed it out—as if the process by which they were generated had been repeated over and over again, under slightly though systematically varied conditions. Thus interpreted, Mendeléef's famous "Periodical Law" indicates persistence of method amid a changing environment.

"The leading outlines of the atomic theory," Sir Arthur Rücker stated in his presidential address to the British Association at Glasgow, "are forced upon us at the beginning of our study of Nature, not only by *a priori* considerations, but in the attempt to comprehend the results of even the simplest observation. These outlines cannot be effaced by the difficulties which undoubtedly arise in filling up the picture. The cogency of the proof that matter is coarse-grained is in no way affected by the fact that we may have

grave doubts as to the nature of the granules."

The subject, in very truth, is not one to be treated with off-hand security; it has far-reaching implications. Atoms and molecules constitute only the apparent parts of a vast sub-sensible whole. They do not act in isolation; their mechanism would remain inert, their functions would cease, but for the means of intercommunication provided in seemingly blank space.

If an all-pervading medium had not been discovered—as it virtually was by Faraday and Clerk-Maxwell—it would have had to be invented, so indispensable are its services to questioners of Nature. Indeed, there is some danger that ethereal physics, with its wide and dreamy outlook, may dominate and compromise the future of science. The adoption of the undulatory theory of light implied the existence in space of something capable of undulation. But it proved far from easy to create an intangible fluid endowed with the requisite qualities. A gas will not execute luminous vibrations; and, for a time, the ether was regarded as a kind of anomalous solid. Material status, however, it has probably none definable in terms of our experience. Yet it is most perfectly fitted to its office; and its office, so unobtrusively discharged, is vital to the economy of Nature. Without an ether, there could be no light; heat could not be radiated, electric waves could not be propagated; the very power of gravity would, probably or certainly, be inoperative.³ Intangible and unseen, this ocean of energy, in which the universe is plunged, outlasts fleeting phenomena, and reabsorbs manifestations of force. It is, so to speak, an ultra reality.

We have, then, in a manner, reverted to the old Cartesian idea of a *plenum*. Matter is no longer conceivable apart

from the medium which transmits its activities; and the medium is essentially limitless and universal. Nay, the belief has come to prevail that matter and the medium are one—that they differ, not substantially, but merely in their "inevitable accidents." Atoms, as Sir John Herschel said, bear the stamp of "manufactured articles;" and the temptation is irresistible to regard ether as their raw material. Lord Kelvin gave tangible shape to this latent persuasion by his hypothesis of "vortex-atoms." It was founded on Helmholtz's investigation, in 1858, of the unlooked-for properties of "vortex-rings," such as an expert smoker may blow at will from the mouth of a tobacco-pipe. Vortex-rings are differentiated only by their whirling motions from the fluid in which they float; they subsist, however, in complete independence of it; they are, under ideal conditions, indestructible, and possess other faculties of great speculative interest. Lord Kelvin believed he had found in them the key to the enigma of matter; and his vortex-atoms, by their alluring correspondences with actual conditions, obtained wide vogue. Yet they proved, in the long run, to be nothing more than beautiful dynamical toys; their indispensable matrix is a "perfect fluid," and a perfect fluid is not elastic, and cannot suffer distortion; but the phenomena of electricity, as Professor Larmor has urged, imply effects due to elasticity; and his view that atoms are foci of ethereal strain commands at present general acceptance, perhaps because of the indefiniteness of its import.

The growing tendency to rationalize tangible facts by means of intangible activities reached a climax in Professor Osborne Reynolds's "inverted" theory of the Universe.⁴ The inversion of ideas advocated consists in regarding

³ E. T. Whittaker, "Month. Notices," vol. lxl. p. 619.

⁴ The Sub-Mechanics of the Universe, Cambridge, 1903.

matter as a deficiency of mass, ether as an indefinitely extended pack of massy atoms, while gravity results from the purely mechanical effort to bring together the negative inequalities constituting matter. To the granular medium exerting pressure estimated at about 750,000 tons to the square inch, a mean density ten thousand times that of water has to be assigned. The human mind is incapable of gauging the probability of such transcendental conditions; they are apprehended only as a visionary possibility. The hypothesis, nevertheless, is recommended by the reputation of its author, who devoted twenty years to its elaboration; and it serves, at any rate, to exemplify the intensity of thought given, in our times, by men of the highest technical acquirements to subjects accessible only by the elusive analogies of the sub-sensible with the sensible world.

From the ether to the "Ur-Stoff," speculation glides scarcely conscious of a transition. With atoms, we have clearly not reached the bed-rock of substance. Already, in 1815, Prout put the query, What are atoms made of?—and furnished the reply, Of hydrogen. Various aggregated hydrogen-particles, he held, compose the chemical units of all other substances, the ascending scale of atomic weights representing the increasing degrees of complexity in the aggregations. But if this were so, equivalent numbers should, without exception, be whole numbers (that of hydrogen being = 1), and this is by no means the case. Their fractional parts have not been wiped out, as Prout, with sanguine facility, assured posterity that they would be, by more refined determinations. Hydrogen has, then, been deposed from the primacy claimed for it. Yet the search for the Baconian *materia in-*

formis—that which is "potentially all things and actually nothing"—was not therefore intermitted. For the chemical elements are unmistakably and significantly akin; they must have a common ancestry; and the parent-substance can scarcely have been used up or annihilated. But the genealogical tree has a multitude of interlacing branches. About eighty different species of matter have, so far, been recognized, and their degrees of relationship are most various. Some are barely distinguishable "twin-Dromios;" others, like hydrogen, stand apart with a strongly marked individuality. The separation of all might, a few months back, have been confidently pronounced definitive. Recent discoveries, however, compel a suspension of judgment as to the feasibility of some modified kind of transmutation.

Chemical diversities are of prime necessity to the structure of the world and the maintenance of life, but no attempt has been made to explain them. They are taken no account of in physical theories of matter. There is no visible reason why "vortex-atoms" or "strain-atoms" should obey laws of combination, or fall under the compulsion of mutual affinities. Nor is there room found in Professor Osborne Reynolds's comprehensive scheme for the specialization of matter or the selective appetencies which ordinarily accompany it; above all, for its distinctive relations with light. These are so complex as to enforce the conclusion—even if there were no other grounds for it—that atoms are in reality highly intricate systems. The question then arises whether those systems are absolutely, and under all circumstances, stable, or whether they may, by violence of heat or otherwise, be overthrown and subverted? From the basis of evidence furnished by astronomical spectroscopy, Sir Norman Lockyer has long and persistently urged that they

* Fowler's "Novum Organum," pp. 248, 330, note.

can; that, in the furnaces of the sun and stars, terrestrial matter is reduced to a more elementary condition. No clear case has, indeed, been made out for the occurrence of "celestial dissociation," yet the facts alleged bring into instructive prominence peculiarities of light-emission demonstrative of a curious independence of action in the minutest sections of the vibrating mechanism. This is confirmed by the magnetic disturbances of their movements, legible, through the "Zeeman effect," in significant spectral alterations. They are, even for one and the same substance, of so diversified a nature as to encourage a hope that this new method may eventually provide a clue to the labyrinth of atomic organization.

But between the theoretical discernment that the disintegration of atoms should be feasible and its actual accomplishment, there lay a formidable chasm; nor could it have been bridged if the traditional methods of the chemical laboratory had been left unaided. Furnaces and affinities were here inoperative. A subtler agency was required. Since those antique times when electricity figured in text-books as an "imponderable principle," we have learned much about what it can do, but little about what it is. "Ether in motion" might pass for a definition in the middle Victorian era; it has, however, long ceased to be even tolerably satisfactory, and the present tendency of thought is towards the assimilation of this marvellous form of energy with ordinary gross matter. There is, at any rate, little doubt that matter owes to association with it most of its palpable properties. Chemical diversity is assuredly regulated by electrical relations. Substances are decomposed by electrolysis in the strict proportion of their combining weights. An equal number of inter-atomic bonds are al-

ways broken by the same amount of electric force. Indeed Faraday, the founder of electro-chemistry, held the conviction that so-called "affinity" results wholly from the mutual action of atomic charges on material atoms. The novel view thus introduced of electricity as a discrete substance was destined to be further recommended.

Sir William Crookes began about 1873 a series of investigations on the phenomena of vacuum-tubes illuminated by electricity. He found in them, as he said, "a new world, where matter may exist in a fourth state, where the corpuscular theory of light may be true, and where light does not always move in straight lines." There is, in truth, no more effectual apparatus for refined inquiries into the secrets of Nature than glass bulbs of varied forms, highly exhausted, and fitted with electrodes. When the discharge is made to pass, beautiful and brilliant luminous appearances are produced, which alter in character as the vacuum is rendered more perfect, and finally all but completely vanish. Although the pressure in the tube is, at this stage, of only about one-millionth of an atmosphere, the current is not arrested, but the manner of its transport is entirely changed. It is now borne across the dark space by a stream of particles from the negative pole, obscure in themselves, but occasioning a vivid glow of phosphorescent light on the glass wall struck by them. That the stream is genuinely molecular is proved by its susceptibility to magnetic influence. The luminous patch marking the end of its course is instantly displaced on the approach of a magnet to the tube, and it is displaced in such a way as to show that the path of the electrified particles has been rendered curvilinear. The discharge, in fact, tends to describe a circle round the line of magnetic force as an axis.

Now this sweep of residual gas bears

* *Philosophical Transactions*, vol. cxxx. p. 164.

a cargo of negative electricity, which can be accumulated, with proper care, on the walls of an insulated receiver, yet it has properties unlike those of everyday matter. Its peculiarities relegate it, as Sir William Crookes from the first insisted, to a different category from solids, liquids, or gases; it has assumed a "fourth state;" it is radiant matter. In 1894 a fresh start was made with its investigation. Hertz had noticed the transparency of metallic films to "cathode-rays," as the electrified vacuum-torrent was named in Germany. Philipp Lenard provided an aluminium "window" for their convenient exit from their native prison-cell, and diligently studied their behavior in the open. It proved to be of a remarkable character. Cathode-rays have the power of discharging electrified bodies. They effect this by rendering the surrounding dielectric temporarily conductive, so that the charged object, ceasing to be insulated, promptly sinks to a neutral condition. They can also impress photographic plates, and, in these two respects, show a similarity to highly refrangible light. They comport themselves, however, otherwise very differently. Thus metals are, in a qualified sense, transparent to them, while they are absolutely stopped by quartz. Gases become turbid under their impact. The particles scatter the rays into a dim bluish fog. And the effect depends for its intensity simply upon the mass of the molecules present in a given space, quite irrespectively of their chemical quality. Oxygen at one-sixteenth pressure, for instance, is exactly as permeable to cathode-rays as hydrogen at normal pressure.

Röntgen-rays are secondary to cathode-rays. They are a peculiarly fine kind of ethereal disturbance arising through the bombardment of the walls of vacuum-vessels by "radiant matter."

* In reference to their origin at the "cathode," or negative pole.

Some of its properties are possessed by them in an exalted degree. They destroy electrical insulation, they decompose salts of silver, they are enormously penetrative of substances opaque to light. They cannot, on the other hand, be deflected from their rectilinear paths by the most powerful magnetic action, and this diversity is decisive as to the fundamentally different nature of the two kinds of radiation. Cathode-rays are corpuscular, Röntgen-rays are ethereal. In the one case, there is a bodily transport of material; in the other, movement alone is propagated. The astonishing circumstance is that the phenomena should be so nearly akin, that the division should be so narrow between manifestations belonging to spheres widely sundered in our ordinary thoughts. "In the limit," however (as mathematicians say), they may possibly coincide.

But in what sense are cathode-rays to be regarded as of material composition? What is that "fourth state" vaguely divined by Sir William Crookes? We have to consider, in the first place, that it takes its origin from the residual gases in vacuum-tubes, when the exhaustion has proceeded so far that no more than about twenty billion molecules are left in each cubic centimetre of space. There were a million times more of them to begin with; but certainly enough remain to provide carriers for the negative discharge. These carriers, however, are neither molecules nor atoms. They lie outside the scope of chemical cognizance. Whatever the kind of gas in which they are produced, their properties are identical. They may be said to constitute generalized matter—the substratum of matter differentiated, as we ordinarily know it, into chemical species. Here, then, we are perhaps at last confronted with the long-sought primeval stuff designated by Sir William Crookes "protyle," the fundament-

al element out of which the whole family of tangible and ponderable elements were, in the dim beginning of things, hypothetically constructed. The varieties of matter, in the late Dr. Gladstone's words, "have been built up one from another according to some general plan." And Sir William Crookes added that "the array of the elements cannot fail to remind us of the general aspect of the organic world," "variation and development," inorganic as well as organic, "running along certain fixed lines which have been preconceived and preordained."

This was said in 1886, and although it would be rash to assert that the speculation has been verified, an unexpected degree of plausibility has certainly been given to it by recent discoveries. If not the semi-mythical prototype, at least a colorable imitation of it can be generated at will in vacuum-tubes. Not indeed without the aid of electricity. Sub-atomic arcana are, on any other terms, impenetrable. Infra-elementary matter appears to be inevitably "charged;" we have, at least, no certain knowledge of its existence in a neutral state. Professor J. J. Thomson defined cathode-rays as "convection-currents of electricity;" they are evoked as instruments for the reintegration of interrupted circuits. The process is analogous to that which takes place in electrolysis, when the "ions," or dissociated particles of a substance in solution, travel, with their opposite charges, to the positive and negative poles respectively. But the ions of electrolytes are of atomic dimensions; those formed in rarefied gases are of a far lower order of magnitude. Professor J. J. Thomson has shown, by a convincing train of reasoning based upon experimental data, that the "corpuscles" (as he calls them)

hurled from the negative pole in a vacuum are about one thousand times less massive than hydrogen atoms.

"These negatively electrified particles," he writes,⁹ have the same electric charge and the same mass whatever be the nature of the gas inside the tube or whatever the nature of the electrodes; the charge and mass are invariable. They, therefore form an invariable constituent of the atoms or molecules of all gases, and presumably of all liquids and solids."

The invariability of the charge has an accentuated significance through Professor Thomson's demonstration that the charges on the cathodic particles of any gas are not only equal among themselves, but are also equal to the electrolytic charge on a hydrogen atom.¹⁰ Hence we are led to believe in the existence of ultimate electrical units, or "electrons," attached to material particles, though capable, some audacious thinkers opine, of travelling free from their companionship, and, in any case, claiming a monopoly in the office of electrical conduction. Without the intervention of electrons, it seems, the transport of electricity would be impossible. Our telephones would be dumb, our cables would transmit no messages, our lamps would cease to be incandescent. The modern Ariel would no longer be the minister of Prospero, but the prisoner of Sycorax. Through the sole agency of electrons, charged bodies revert to a normal condition; and it is by their power of "ionizing" the surrounding air that ultra-violet light, cathode-rays, and Röntgen-rays exercise their characteristic discharging function. Gases are said to be ionized when their molecules are broken up into smaller particles, or "ions," each associated with an electron; and ionization is coming to be

⁹ Report British Association, Birmingham, 1886, p. 560.

¹⁰ Proc. Royal Institution, vol. xvi. pt. III. p. 577.

¹⁰ Encycl. Brit. vol. xxviii., art. "Electric Discharges," 1902.

regarded as one of the ordinary processes of nature.

The integrity of the atom can then no longer, in the face of so much cumulative evidence, be maintained. As a combining unit it subsists indestructibly. An atom is the chemical minimum quantity; there is no such science (that we are yet aware of) as sub-atomic chemistry. But sub-atomic physics has suddenly acquired such interest and importance that thought waits spellbound on the course of its advance, while traditional persuasions adjust themselves, as best they may, into conformity with its rapid developments.

Meanwhile, some instruction may be derived from a cursory glance at the speculative situation. Ideas are, of course, not unanimous, yet there is approximate agreement on certain fundamental points. Electrical theories of matter are in the ascendant; and they almost necessarily involve the ascription of a virtual elasticity to the medium. The Lucretian and Newtonian hard spherical atom has been replaced by some form of system—a system of intricate construction, the parts of which possess swift and varied movements—a system, moreover, subject to possible disturbance or even overthrow of equilibrium. Professor Larmor adopts the hypothesis that an atom consists of an aggregation of electrons in orbital revolution; that its mass is proportionate to the number of its constituents; and that inter-atomic forces are entirely, or mainly, of an electrical nature. His definition of an electron as “a centre of convergent strains in the ether” removes, perhaps, the blankness of ignorance, but conveys little of the illumination of knowledge. A similar view was advocated by Sir Oliver Lodge, with his customary ingenuity, in his Romanes Lecture delivered at Oxford on June 12 last. Assuming that atoms are actually collections of

electric charges in violent motion, he deduced the following two consequences: First, that since electrons, subject to acceleration, emit radiations, luminous or otherwise, they must in doing so lose energy, and tend to collapse towards the centre; secondly, that the attendant increase of velocity is likely to eventuate in the subversion of the system. And here we are brought face to face with the extraordinary phenomena of radio-activity.

M. Becquerel, of Paris, discovered in 1896 that the scarce metal uranium has the faculty of emitting radiations which blacken sensitive films and discharge electrified bodies. Their properties are thus closely analogous to those of cathode and Röntgen rays. They are, however, emitted spontaneously; no exciting agency is needed to produce them; the metal of itself gives off energy and gives it off incessantly and irresistibly. The outflow cannot be stopped. This was unprecedented; but it made only a beginning.

Uranium—or rather its oxide—was discovered by Klaproth in 1789. He named it after the planet Uranus, just then the *dernier cri* of celestial exploration. The metal belongs to the chromium group of elements. It is blackish gray in color, and very heavy, its specific gravity being nearly nineteen times that of water, its combining weight 238 times that of hydrogen. Until a few months ago, no other substance was known to possess so massive an atom. Uranium is mainly derived from pitchblende, a velvety black mineral met with in the Erzgebirge and at Redruth in Cornwall. Doubtless it will before long be found elsewhere, for the demand has just now become so keen that it is worth while to prospect for this unsightly product as carefully as for gold. Pitchblende is a perfect museum of chemical rarities. Composed fundamentally of ura-

zium oxides, it "occludes" a small quantity of helium, and is, to a minute extent, contaminated with the evasive substance polonium and with the mysterious substance radium.

The investigations of Monsieur and Madame Curie have been, for the most part, carried on in close concert. They have made common stock of their faculties and endowments, and the brilliant results obtained by them stand, in general, to their common credit. The rule has, however, one striking exception.

The discovery of radium was due to a sagacious intuition of Madame Curie.¹¹ This gifted Polish lady observed that pitchblende in the rough is more strongly radio-active than the uranium extracted from it, and drew the inference that the quality must belong, in an enhanced degree, to some other of its constituents. The dross, then, might repay attention better even than the pure ore; and this proved very emphatically to be the case. As the upshot of tedious and difficult processes of "fractionation," there was procured, in 1898, in the Paris laboratory, 1 décigramme (1½ grain) of pure radium chloride, the quintessence, so to speak, of fully a ton of pitchblende. This strange substance, in which the riddles of matter and energy seem to be focussed, is colorless, but self-luminous. It proclaims its unusual quality by shining in the dark. The metal forming the base of the salt is a member of the alkaline-earth series headed by magnesium, and stands in a particularly close relationship to barium. In burning, it gives a brilliant red light, with a strongly characteristic spectrum, the vivid lines composing which correspond in arrangement with rays distinctive of the allied elements magnesium, calcium, strontium, and barium.

¹¹ S. Curie, "Thèses présentées à la Faculté des Sciences," Paris, 1903. Translated in *Chemical News*, August 21 et seq.

¹² *Physikalische Zeitschrift*, Jahrgang 4, p. 285.

um. From the law of these correspondences, Runge and Precht deduced, by a method of scarcely questionable validity, an atomic weight for radium of 258.¹² Madame Curie had obtained, by less inferential means, the lower value of 225.

The supposed new radio-active elements, "polonium" and "actinium," have not, up to the present, approved themselves as really existent. Polonium—so named by way of compliment to Madame Curie's nationality—is associated with the bismuth ingredient of pitchblende, much as radium is with its barium-constituent; but with this important difference—that the companion metals are in the former case inseparable; no amount of fractional crystallization has availed to isolate polonium. Nor can it be individualized by its spectrum, while its activity is perishable—a circumstance in itself suggestive of its being merely "induced," not inherent. F. Giesel has, accordingly, come to the very probable conclusion that "polonium" is nothing else than bismuth which has acquired temporary self-radiance through the vicinity of radium.¹³ For the quality, as we shall see presently, is as infectious as a zymotic disease, and almost as difficult to "stamp out."

Still more dubious is the status of "actinium," held by M. Debierne responsible for the activity of impure thorium salts, extracted from the residues of pitchblende.¹⁴ Thorium itself, on the contrary, has fully maintained the position assigned to it by C. G. Schmidt in 1898,¹⁵ as a genuinely and primarily radio-active element. A member of the tin family, this metal has been known since 1828. It is derived from the Norwegian mineral thorite no less than from the North Carolinian monazite; its affinities both

¹³ *Chemical News*, August 7, 1903.

¹⁴ *Comptes Rendus*, April 2, 1900.

¹⁵ Wiedemann's "Annalen," Bd. lxx. p. 141.

for oxygen and sulphur are very powerful, and it has a combining weight of 232.

Practically, then, experiments in radio-activity deal with the three substances—uranium, thorium, and radium; and these three substances have the three highest atomic weights of any determined by chemists. The coincidence is not accidental. If atomic equilibrium be not indefinitely stable, those systems in which its adjustments are most complex and delicate should be the most liable to subversion; and radio-activity appears to be a concomitant of inorganic, as phosphorescence is of organic decay. If this be true, the rarity of bodies under sentence of slow dissolution, and continually undergoing that sentence, need occasion no surprise. The wonder, perhaps, is that they have survived so long. In point of fact, uranium and thorium, although of scanty occurrence, are still articles of ordinary commerce; but radium can hardly be said to have a price. It can, indeed, be bought with money, and so, possibly, can a roc's egg; but not even a multi-millionaire could procure much of the former commodity or many specimens of the latter. The possessor of a ton of radium might, it has been estimated (if the market remained firm), pay off the National Debt; but a ton of radium does not, perhaps, exist on this earth, and the solar store itself may, by this time, be running short.

Chemically considered, radium is a normal substance. It shows the affinities proper to its class, forming ordinary combinations in the regular way. Also its spectral relations, which might be expected to reveal subtle peculiarities of intimate structure, correspond perfectly to its standing in the chemical hierarchy. It is its physical behavior that has opened up a new region of experience and surmise. Strictly speaking, a reconstruction of ideas

was prescribed by the first observation of the Becquerel-rays, since they obviously involved the expenditure of energy for which there was no visible source of supply, and so constituted a glaring anomaly in the admitted order of things. But the phenomenon was comparatively inconspicuous. The disclosure was made in very small type: before its full purport was comprehended, it had to be "writ large," as it most certainly is in the processes connected with radium. For in them the activity of uranium is intensified at least five hundred thousand times!

Radio-activity manifests itself by definite, though highly complex, effects. They develop partially in uranium, fully both in thorium and radium. Their analysis has been largely due to the splendid work carried on at Montreal by Professor Rutherford with the able co-operation of Mr. Soddy. He employed, for the first time in such researches, a *quantitative* method. He precisely measured results. The scale by which he gauged their intensity, was the ionization, in a certain interval, of a given quantity of air. And this, in its turn, was known by the readings of an electrometer. The rate of leakage of electricity, then, under the influence of the emitted rays, supplied the standard for determining their efficiency. And it is one eminently trustworthy and refined. The electric test for radio-activity is of almost preternatural delicacy. Quantities of matter can, by its aid, be detected five thousand times smaller than those revealed spectroscopically. Yet the burning of far less than the millionth of a grain of sodium suffices to bring out its persistent pair of yellow rays. Amounts "below compute" are thus, indeed, concerned in the activities of self-radiance. What those activities are, what they involve and imply, we may now more particularly consider.

Thorium and radium give off, with-

out let or pause, three kinds of "rays," besides an "emanation." The rays may be distinguished as atomic (those designated Alpha-rays), cathodic (Beta-rays), and ethereal (Gamma-rays). The first species are composed, there is the strongest reason to believe, of material atoms, about as massive as hydrogen, or perhaps as helium-atoms. They are positively charged with electricity, can be deflected in a magnetic field, and travel with prodigious velocity. These extraordinary projectiles are flung forth so violently as to attain a speed estimated at approximately one-twelfth that of light, or nearly 16,000 miles a second! Alpha-rays are quickly absorbed by ordinary matter, and have an equivalent faculty for ionization, electric charges dispersing, under their impact, with extreme rapidity.

The Beta-rays are virtually matter in that "fourth state" of which Sir William Crookes had the earliest intuition. They are swarms of flying corpuscles, one thousand or so equilibrating a hydrogen-atom; they are strongly actinic, highly penetrative, electrically charged. And that the charge they carry is negative becomes evident through the opposite curvature given to their paths by magnetic influence from that taken by the Alpha-rays. They are, moreover, curved unequally, and, like variously tinted light in passing through a prism, become dispersed into a "magnetic spectrum." This intimates, apparently, inequalities of velocity among the particles composing the rays. The third form of metallic radiance moves in straight lines irrespectively of the approach of the strongest magnet, and traverses with facility tolerably thick barriers of lead. Gamma-rays are generally believed—and Madame Curie supports the opinion—to be ultra-luminous pulses of the Röntgen type start-

ed by the disturbing effect on the ether of atomic cataclysms; but Mr. Strutt inclines to the view that they are material, though electrically neutral emissions.¹⁰

The "emanations" from radio-active bodies are entirely different from any of the rays—Alpha, Beta, or Gamma—sent out by them. They are not shot away, like volleys of red-hot stones from a volcano: they diffuse slowly and tranquilly into the air, rendering feebly luminous every object encountered by them. Their nature has been, with brilliant success, elucidated by Professor Rutherford. They are, beyond doubt, heavy gases. This is astonishing. We had grown used to the emission of rays of sundry kinds—deivable and non-deivable, penetrative of gross matter, or readily stopped by a film of mica, of rays ionic, atomic, and etheric. But to find metals bleeding to death (so to speak) by the irrestrainable welling forth of strange aerial substances from their intimate parts was a novelty that made the breath come short. These "emanations" (the word has been specialized for their designation) can be blown into tubes by air-currents; they traverse cotton wool, sulphuric acid, even metallic foil, but stop short at mica. The most drastic chemical treatment takes no effect upon them; but—and here is the crucial point—they are condensed by extreme cold. At temperatures higher than that of liquid air they become totally inoperative, but resume effectiveness when warmth is restored. They have, in fact, quite definite boiling points, of approximately—150° C. for the radium emanation,—120° for that of thorium. Gases, accordingly, they must be; and that they belong to the inert class, typified by argon and helium, is demonstrated by their inaccessibility to chemical attack. From their rate of diffusion, they are further inferred to have atomic weights not less than 40 nor exceeding 100.¹¹

¹⁰ Proc. Royal Society, August 5, 1903.

¹¹ Rutherford, "Phil. Mag.," January, 1903, p. 97.

Now these curious effusions are believed to be the sole agency by which radio-activity is "induced" or "excited" in surrounding objects. The quality permanent in radium and thorium is distributed, as a transient adjunct, impartially all around. Any substance within reach of the emanations from them acquires for a time their peculiar kind of activity, and this seems to result from the actual deposition on their surfaces of an otherwise imperceptible film of solid radio-active matter as a disintegration-product of the gaseous outflow. Inestimably minute amounts of substance are, it must be remembered, here in question. After accumulation during thousands of years, they might well remain inappreciable with the balance.¹⁸

Emanations are electrically indifferent; they show no polar preferences. They possess, nevertheless, the faculty of ionizing other gases, and assert their presence by consequent effects of electric discharge. But only transitorily. Thorium gas loses most of its activity in a few minutes, radium gas in some days. Both are self-luminous; their passage through glass tubes, the retardation of its progress in the capillary parts, the quickened flow in wider sections, the pauses occasioned by obstacles, can be followed with ease by the eye in a darkened room.¹⁹ Remarkable above all is their association with their better-known relatives of the inert family. Sir William Ramsey and Mr. Soddy obtained decisive spectroscopic evidence that the gases evolved from radium bromide by solution in water include helium. It seemed, moreover to develop from the emanation. A number of characteristic helium-rays, at first invisible, were derived from a tube in which radium gas had been collected, and allowed to stand during four or five days. Professor

Rutherford is of opinion that the emergent helium was really *made fresh* from the emanation. For this is apparently a fleeting form of matter; it is breaking up into others, and its break-up is accompanied by the emission of Alpha-rays. Now Alpha-rays are, as we have said, atomic in composition, and the weight assigned to the atoms composing them possibly agrees with the atomic weight of helium. That they are, in fact, helium-atoms the Canadian investigator is persuaded, and we can rely upon his neglecting no experimental device for testing the truth of so significant a view.

On March 16, 1903, a new phase of the "mystery of radium" was entered upon. M. Curie announced to the Academy of Sciences that pure radium chloride is self-heating—that it disengages heat enough to maintain itself at a constant temperature 1.5° C. (nearly 3° F.) above its surroundings. A gramme of radium, in other words, develops thermal energy at the rate of about 100 small calories per hour—enough to raise to the boiling-point its own weight of ice-cold water. The attendant luminescence is of an unexampled nature. Sir William and Lady Huggins succeeded, in July last, in obtaining a photograph of its spectrum with an exposure of three days, and it proved to be of a type hitherto only produced by means of electric discharges. At ordinary temperatures, a linear spectrum had never previously been recorded; but records exist only to be broken where radium is concerned. The bands impressed upon the plate were certainly those of nitrogen; and the nitrogen stimulated in so unusual a manner may have been occluded or atmospheric; the question is *sub judice*.

The luminous effects due to the action of the new substance on its environment were strikingly displayed in

¹⁸ Rutherford and Soddy. "Phil. Mag.," vol. iv. p. 396, 1902.

¹⁹ Ramsay and Soddy, Proc. Roy. Society, July 28, 1903.

some experiments performed by Sir William Crookes before the Royal Society on March 19. A screen of zinc sulphide (a phosphorescent substance) placed in front of a fragment of radium nitrate glowed with a brilliant illumination, shown by a pocket-lens to consist of separate splashes of light. Each charged atom projected by the salt, and arrested by the screen, blazed with the energy of its transformed motion. With the approach of the firing-point to the target, "the scintillations became more numerous and brighter, until, when close together, the flashes followed each other so quickly that the surface looked like a turbid luminous sea." Moreover, if the end of a platinum wire, first dipped in a solution of radium nitrate and then dried, was allowed momentarily to touch the zinc-sulphide screen, the point of contact lit up and became a centre of activity, the surrounding surface remaining "alive with scintillations" for weeks afterwards.

Radium energizes in many directions, some of them out-of-the-way and peculiar. Thus, it can ozonize oxygen—that is, condense it by rendering its molecules tri-atomic, just as happens in a thunderstorm. It can also transform white into red phosphorus, and induce other subordinate chemical changes signified by alterations in color. Its physiological action is very marked. Skin-tissues are destroyed in its vicinity, and the emanations from it exert a prejudicial, if not fatal, influence upon the brains of animals imperfectly protected against them. Their agency, on the other hand, may prove invaluable for curative purposes when properly regulated and applied.

The property of self-radiance is inalienable and uncontrollable. The processes connected with it are evidently of a different order from those ha-

bitually dealt with by chemists; they are scarcely at all amenable to laboratory treatment. Thorium can, it is true, be deprived, by intense ignition, of emanating power—which is, however, regained after solution and reprecipitation. Again, the outflow of radium-emanation is greatly quickened by the application of heat; but this indicates merely an acceleration in the rate of escape, none in the rate of production.²² The store accumulated in the interstices of the salt is rapidly set free—that is all. A curious anomaly, however, effects the evolution of heat by radium. Far from being checked by extreme cold, it actually increases under a condition paralyzing to most of the other activities of matter. Measured by the strict standard of the amount of condensed gas volatilized in a given time, the thermal power of radium bromide, although the same at the temperature of liquid air as in a warm room, becomes notably augmented when cooled by liquid hydrogen to within a score of degrees centigrade of the absolute zero. This fact, at present of obscure import, was ascertained by M. Curie at the Royal Institution, with the aid of the fine refrigerating equipment established there by Professor Dewar. Another inexplicable characteristic of radium is that its heat-production rises gradually to a maximum during a month after the preparation of the salt, and then retains, for an indefinite time, a steady value.

It cannot be denied that the phenomena of radio-activity are subversive of ordinary ideas in physics. They demand, at least, a rebuilding of the edifice they form on a wider and stronger basis. Now work without waste is impossible; and the recently investigated substances do a great deal of quite palpable work, yet show no corresponding signs of waste. They suffer no perceptible loss of weight; their

²² Rutherford, "Phil. Mag.," April, 1903, p. 453.

properties remain unmodified; their spectra, which might be expected to betray incipient molecular transformations, are unvarying and uncommunicative. How, then, is their energy supplied? The question is fundamental. We are told, in reply, that a store is drawn upon never before, within human experience, tapped. This is the vast reservoir of atomic energy. Molecular energy is always in play. It is set free by the lighting of every jet of gas, the burning of every coal-fire. But no chemical change touches the atom. Its penetralia continue inaccessible during the most explosive crises of combination. Nor are they thrown open by heat. Electricity alone wields the key. For we must believe that atoms are organized on what we may call an electrical footing. Particles of electricity are the springs of the mechanism; electric forces animate and govern it. The hydrogen-atom has thus been inferred to consist of about one thousand "electrons;" and these atoms of atoms being equal and similar in all the chemical elements, it is permissible to conclude that 258,000 of them are aggregated in the radium-atom. Professor J. J. Thomson calculates that if each corpuscle carried the regulation charge²¹ of negative electricity associated with an equal positive charge, and if, further, these opposite charges were separated to the extent of one hundred-millionth of a centimetre, then the intrinsic energy of radium-atoms would be so enormous that a mere diminution of it by 1 per cent. would suffice to maintain during 30,000 years the emissive manifestations determined by M. Curie.²² And these represent, we must remember, for each gramme of radium an output in work of no less than 300 foot-pounds per hour.

²¹ Estimated from the best available data at 3.4×10^{-10} electrostatic units.

²² Nature, April 30, 1903, p. 602.

Radio-activity, by Professor Rutherford's definition, is a consequence, or an accompaniment, of "sub-atomic chemical change." Expressly, of "sub-atomic change." In ordinary chemical processes, molecules are decomposed and recomposed, their constituent atoms remaining intact. But here we are on totally different ground. "Atomic disintegration" is the *mot de l'énigme* in the new "Canadian" theory; and the Canadian theory, for the present, holds the field. That it may be superseded through the progress of research is amply possible; but, as a working hypothesis, it is strongly recommended by the simplicity of its assumptions and by the harmony which it has substituted for confusion. The novel facts of self-radiance are, indeed, closely consilient with much that had been observed before. Becquerel-rays are the fit sequel to cathode-rays. They re-assert, with added emphasis, the possibility of elemental decomposition. What they told for the first time was that it might occur spontaneously. The disruptive force of electricity employed in a Crookes tube to reduce matter to its "fourth state" is not, under certain circumstances, indispensable. All atoms can probably be pulverized into electrons; but some are, *ab initio*, of so insecure a build that they tumble untouched into ruins.

We may then reasonably admit that radium and its congeners are subject to an intimate alteration of structure, unintermittent in its progress, though infinitesimal in amount. The dynamical equilibrium of their atoms is subject to overthrow. Only one out of perhaps thousands of millions becomes unstable at a given instant; but the effects of these microscopic cataclysms are of an intensity out of all proportion to the sparseness of their occurrence. They take place by stages, each marked by some common and by a few distinctive symptoms detected and de-

terminated by Messrs. Rutherford and Soddy. The primary event in the course of atomic dissolution is the emission of an Alpha-particle. This leaves behind an atom shattered in its integrity and ready for a further advance on the downward road to final decay. Such atoms constitute the so-called "radium-X," a product separable in minute proportions, by ordinary chemical means, from the parent metal, and embodying, for the time, the whole of its activity. From it exclusively proceeds the "emanation," and the emanation usurps its radiative office, and transfers it to the solid deposit which forms the ultimate recognizable outcome of the initial explosion. Now "radium-X" loses its active quality after a comparatively short time; while it is regained, in corresponding gradations, by the residual metal, at first quite inert. There is thus kept up between them a see-saw of activity. The manufacture of radium-X (and, similarly, of thorium-X) is, in truth, always going on; it cannot be stopped; the ball is set rolling that way.

Five disintegration-products of radium have been individualized—namely, radium-X; a self-luminous gas (emanation) issuing from it; a resulting powdery precipitate, also self-luminous; the cathode-emission of electronized matter; and the Alpha-rays, speculatively identified with helium. All are material entities; all are irretrievably lost to the mother-substance; and the loss, though inconceivably slow, is continual and uncompensated. Radium has then a terminable existence; its span must be comprised within a few thousand years. How, we may ask, does it happen to survive, although as a mineral rarity, to our time? For we cannot suppose a constituent of the earth's crust to have

sprung into existence coevally, let us say, with the building of the Great Pyramid. The riddle is insoluble.

The energy of radio-active change is estimated by our Canadian authorities to be at least twenty thousand and possibly a million times greater than that liberated in any molecular transformation,²³ although some, and notably the reaction between hydrogen and oxygen giving rise to water, take place with extreme violence. But when we penetrate the region of sub-atomic chemistry our ideas need enlargement no less than modification. How wide the enlargement has to be, we may gather from a few illustrative examples based on exact calculation. Professor Rutherford tells us that about three-quarters of the activity of radium results from changes occurring in the very minute quantity of matter constituting its gaseous emanation. And he proceeds to say:

If ever one cubic centimetre of the radium emanation can be collected at one spot, it will exhibit some remarkable properties. The powerful radiations from it would heat to a red heat, if they would not melt down, the glass tube which contains it. This very rapid emission of energy, in comparison with the amount of matter producing it, would continue for several days without much change, and would be appreciable after a month's interval. The very penetrating rays from it would light up an X-ray screen brilliantly through a foot of solid iron.²⁴

Again, Mr. W. E. Willson²⁵ finds that the presence of radium in the sun, in the small proportion of 3.6 grammes in each cubic metre of its volume, would supply the entire vivifying flood of the solar radiations. This is an impressive result, but it refers only to the sun's superficial emissions, and takes no account of the tremendous internal heat which is their source. A really subsistent globe

²³ "Phil. Mag.," June, 1903, p. 589.

²⁴ Nature, August 20, 1903, p. 367.

²⁵ Nature, July 9, p. 222.

containing the supposed small ingredient of radium (about one part by weight in 50,000) would not perceptibly shine. Pitchblende, rendered twenty times more radiferous than it is, would still be a dark body. The whole of the solar radium should be concentrated in the photosphere in order to make it available for inundating space with light. Thus understood, the calculation is highly instructive.

In this new wonderland the scientific imagination naturally claims some degree of licence. Speculation, for instance, as regards the genesis of the chemical elements is once more rife. We are asked to believe that material species originated through the break-up of radio-active substances. It is true that these are unstable, and give rise, through their decomposition, to sundry types of matter totally different from themselves. We might go so far as to give a qualified assent to the view that those very peculiar bodies, the inert gases of the atmosphere, are produced in this very peculiar way. Yet even this admission we make with hesitation, remembering the voluminous cosmical existence of helium and the extreme improbability of its having been wholly derived from antecedent radium.

As a general plan of elemental manufacture, that of piling up complex and unstable atoms, for the mere purpose of arriving, through their disintegration, at simple and stable ones, might deserve to be stigmatized as roundabout and unintelligent. Nature is accordingly unlikely to have adopted it. There is every indication, on the contrary, that uranium, thorium, and radium mark the end, not the beginning, of a course of development. They signalize, we can dimly see, the point where the evolutionary design, so far pursued with success, ceased to be practicable. As the outcome of its execution we have the whole series of

the chemical elements, variously constructed of one primal stuff. And that primal stuff consisted, we are driven to believe, in a crowd of "electrons," almost infinite in number, incoherent in arrangement, boundlessly diffusive in space. Thus the vaguely imagined "protyle" has, in a sense, been brought to scientific cognizance. It can be manufactured in exhausted vessels; may be, at pleasure, set free or kept prisoner, or put through its programme of luminous, electrical, and physical performances. Yet all this (and it is much) brings us no nearer to the heart of the mystery. What electrons essentially are cannot be told, nor so much as whether they include any portion of gross matter. They indeed possess mass; but so does electricity in the sense that it shows a kind of inertia; and thought is arrested with the unsatisfying assertion that "matter is an electrical phenomenon." Granting, further, that electricity arises through a strained condition of the ether, we reduce everything to a unity, immense, indeed, but unintelligible.

Assuming, however, as we must, the existence of electrons, we have to consider how they might have been built up into atoms. It was not possible without the application of force in some form. The process, we have to remember, was of an inverse nature to that by which nebulae presumably condensed into stars. This latter is a *facilis descensus*, a flow downhill, an inevitable and irreversible decline from a higher to a lower plane of energy. But the agglomeration of electrons into atoms was opposite in kind and tendency. It involved the doing of work. Electrons are no doubt adapted for agglomeration, yet they will not agglomerate unless under compulsion. Just so much energy as a substance gives out in going to pieces was assuredly expended in putting it together. A gramme of radium, according to Pro-

fessor Rutherford's indisputable statement, contains a store of power sufficient to raise 500 tons a mile high. An engine of one thousand horse-power should be kept working for three hours, then, to produce that small quantity of the heaviest of known metals. Whence did this power come? How and why was it directed in this particular channel? Here we meet the impenetrable secret of creative agency. Further discussion would be futile.

Radium is an extreme case; but atoms of all sorts are reservoirs of energy, nor is there any guarantee of their absolute durability. Mr. Strutt finds that most ordinary materials are, to some slight extent, radio-active,²⁶ and water from deep wells at Cambridge and from hot springs at Bath²⁷ contains a gas endowed with a property surely significant of the steady progress of disintegration. "This fatal quality of atomic dissociation," Sir William Crookes declared in his address to the physicists at Berlin on June 6, "appears to be universal, and operates whenever we brush a piece of glass with silk; it works in the sunshine and raindrops, in lightnings and flame; it prevails in the waterfall and the stormy sea." Matter he consequently regards as doomed to destruction. Sooner or later it will have dissolved into the "formless mist" of protyle, and "the hour-hand of eternity will have completed one revolution." The "dissipation of energy" has, then, found its correlative in the "dissolution of matter." We are confronted with an appalling scene of desolation—of quasi-annihilation—surveyed, nevertheless, with cheerful serenity by those evoking it. And they are rightly cheerful, since the law of continuity is far from being so inexorable as is

The Edinburgh Review.

sometimes asserted, and the Designer of the universe may be trusted to see to it that the "treasure of nature's germens" is not spoiled or wasted until they have fully served their turn, and satisfactorily discharged the function allotted to them.

The discovery of radio-activity is one of the most momentous in the history of science. "There has been a vivid new start" (we again borrow Sir William Crookes's expressions). "Our physicists have remodelled their views as to the constitution of matter." The remodelling, indeed, has barely commenced. Thought must get time to clarify. The throng of novelties clamoring for recognition cannot all at once be reduced to perfect order. A traditional standpoint cannot be shifted without some ensuing confusion. What is undeniable is that the Daltonian atom has, within a century of its acceptance as a fundamental reality, suffered disruption. Its proper place in nature is not that formally assigned to it. No longer "in seipso totus, teres, atque rotundus," its reputation for inviolability and indestructibility is gone for ever. Each of those supposed "ultimates" is now known to be the scene of indescribable activities, a complex piece of mechanism composed of thousands of parts, a star-cluster in miniature, subject to all kinds of dynamical vicissitudes, to perturbations, accelerations, internal friction, total or partial disruption. And to each is appointed a fixed term of existence. Sooner or later, the balance of equilibrium is tilted, disturbance eventuates in overthrow; the tiny exquisite system finally breaks up. Of atoms, as of men, it may be said with truth, "Quisque suos patitur manes."

²⁶ *Nature*, Feb. 19, 1903.

²⁷ *Ibid.* April 30, 1903 (J. J. Thomson), Aug. 13, 1903 (H. S. Allen).

THE PORTRAIT OF AN AMERICAN.

The name of William Wetmore Story has come to be (and was indeed before his death, in 1895) associated less with the products of his chisel and pen than with the Barberini Palace, for forty years the centre of English and American society in Rome. The older of "Maga's" readers at least keep a niche in their grateful remembrance for "Graffiti d'Italia," the "Conversations in a Studio," and other writings of his, vivacious and versatile, which first appeared in these pages. The Cleopatra and the Libyan Sibyl (to mention the two best known of his marbles only) would seem to have in them the essence of popularity, so far as the work of the sculptor ever is popular, for any uncritical generation, and not merely for that which admired them so ardently in the Roman Court of the Exhibition of 1862. His sculptured memorials of great men, being mostly of the great among his own countrymen, serve as memorials for himself in America chiefly; yet here daily occasion to remember him is given to the thousands who pass and re-pass his dignified statue of George Peabody, now a little gray and grim, in the shadow of the London Royal Exchange. Fame, however, in its inexorable way, has fixed his place, not for his statues and books, but for his friendships, and justly has associated with him in it his wife. It is not W. W. Story whom it keeps alive so much as "the Storys," as indeed it is they, quite as much at least as the artist and the poet, who live in the letters and records of their circle and contemporaries.

In this verdict Mr. Henry James, Story's biographer,¹ has acquiesced, we

do not doubt without much hesitation. He does not conceal, but exhibits with an amiable irony, the limitations (as he conceives them) of Story as an artist. With the temperament and the personal and social conditions with which they interacted, these limitations constitute what Mr. James calls Story's "case," and he cannot help weighing and pondering it, as he would one of his own creation, though never, be it said, with any failure in loyalty to a friendship. His portrait, as may be imagined, is not an example of the photographer's inferior art. The obvious features are nowhere obviously rendered. Mr. James never comes any nearer doing that than when he speaks of Story as carrying about with him everywhere in his wide circle "his handsome, charming face, his high animation, his gaiety, jocosity, mimicry, and even more than these things, his interest in ideas, in people, in everything—his vivacity of question, answer, demonstration, disputation." It may as well be said at once that the biography is not specially one to reward the literary ragpicker: the "finds" in it at any rate are not of a scandalous kind. One can anticipate also the objection, which literary collectors and gossips like to keep on tap, that it contains little that is new; the critics in this case referring specially to the provision it makes, or rather fails to make, in the way of "facts." Let us quote here, from the biography itself, Mr. James's recollection, *à propos* no less a person than Abraham Hayward, of a lesson he learned in his earlier London days,—the lesson "that the talk easily recognized in London as the best is the delivery and establishment of the

¹ William Wetmore Story and his Friends. From Letters, Diaries, and Recollections. By

Henry James, Edinburgh and London: William Blackwood & Sons. 1903.

greatest possible number of *facts*, or in other words the unwinding, with or without comment or qualification, of the longest possible chain of 'stories.' The passage is to the point, and also admirably exemplifies the alternative fare which Mr. James himself provides:—

"One associated Mr. Hayward," he says, "and his recurrent, supereminent laugh thus with the story, and virtually, I noted, with the story alone—taking that product no doubt also, when needful, in the larger sense of the remarkable recorded or disputed contemporary or recent event, cases as to which the speaker was in possession of the 'rights.' What at all events remained with one was a contribution, of a kind, to the general sense that facts, facts, and again facts, were still the thing dearest to the English mind even in its hours of ease. I indeed remember wondering if there were not to be revealed to me, as for the promotion of these hours, some other school of talk, in which some breath of the mind itself, some play of paradox, irony, thought, imagination, some wandering wind of fancy, some draught, in short, of the *idea*, might not be felt as circulating between the seated solidities, for the general lightening of the mass. This would have been a school handling the fact rather as the point of departure than as the point of arrival, the horse-block for mounting the winged steed of talk rather than as the stable for constantly riding him back to. The 'story,' in fine, in this other order,—and surely so more worthy of the name,—would have been the intellectual reaction from the circumstance presented, an exhibition interesting, amusing, vivid, dramatic, in proportion to the agility, or to the sincerity, of the intellect engaged. But this alternative inquiry, I may conclude, I am still conducting."

Readers of this biography will find that Mr. James, at any rate, does not fail to handle the fact as a point of departure; his difficulty rather, as he ruefully admits, is to get back to it as

a point of arrival, once he has mounted his winged steed. Draughts of the idea, wandering winds of fancy, circulate between its solidities, to such a lightening of the mass, indeed, that sometimes it seems it must float above our matter-of-fact heads.

Mr. James, in a word, has essayed in these very charming and individual volumes a task harder even than that of painting a portrait—as opposed to taking a photograph, or as it is vulgarly called, a "likeness"—of an American of high culture and very varied artistic gifts. His ampler purpose is to reproduce Story among his friends, and to reproduce him and them as constituting, or as representing, at least, "a vanished society." In particular, Story is taken as the type of those precursors who have made Europe easier for later generations of Americans. The old relation, social, personal, æsthetic, of the American to Europe is to Mr. James's view as charming a subject as the student of manners, morals, personal adventures, the history of taste, the development of a society, need wish to take up; and one, moreover, that never has been "done." And so, he explains, a boxful of old papers, personal records and relics, all relating to the Storys, having been placed in his hands, "in default of projecting more or less poetically such an experience as I have glanced at—the American initiation in a comparative historic twilight—I avail myself of an existing instance, and gladly make the most of it." The entertainment, he has to admit, is particularly subjective. The biography, in consequence, opens out and flowers, as it were, in autobiography of the biographer. To Mr. James's wistful eyes the lot of these pioneers fell upon golden days, on the vision of which his fancy dwells with a playful tenderness. So that in these volumes his business is not only with Story's "case" and with those of his

friends; but taking a further subtle step, he occupies himself—fancifully, ironically, shyly, under our enjoying eyes—with his own peculiar “case” as the custodian of this boxful of ghosts whom it is his pious duty to evoke!

First of these delightful evocations comes that of the New England life amidst which William Story was brought up. It was represented for him by his father, a judge of the Supreme Court of the United States and a lawyer of world-wide repute, and in no way, says his biographer, could it have been better expressed than in the character and career of that distinguished man. “All the *light*, surely, that the Puritan tradition had to give, it gave, with free hands, in Judge Story—culture, courtesy, liberality, humanity, at their best, the last finish of the type and its full flower.” He never visited England, though once towards the end of his life he was so near sailing that the invitations were “out” on this side to the most luminous lights of the law to meet him at the tables of Lord Denman and Lord Brougham. Mr. James, as may be imagined, catches for purposes of contrast the simpler conditions of life—the homeliness of the ways and the admirable manners—of this “lovable great man”; who, as he says, wore this character on the very basis of his world, as it stood, without borrowing a ray, directly, from any other; yet of whom it was told that, to the surprise of an English traveller one evening at Cambridge, Massachusetts, he was able promptly to “place” some small street in London of which the name had come up in talk, but of which the traveller was ignorant. Judge Story, in other words, knew his London because, even at that then prodigious distance from it, he had a feeling for it. Story’s mother was the daughter of another American judge, and the granddaughter of General Waldo who commanded

at the siege of Louisburg, and on its fall was rewarded with the grant of a whole county in Maine. Young Story was ten years of age when his parents left Salem, where he was born, and went to Cambridge (near Boston), Lowell’s birthplace. Salem, and its judge, “by his type and above all by what we have called his amenity,” remind Mr. James of something once said to him by an accomplished French critic,

who, much versed in the writings of Englishmen and Americans, had been dilating with emphasis and with surprise upon the fine manner of Hawthorne, whose distinction was so great, whose taste, without anything to account for it, was so *juste*. “*Il sortait de Boston, de Salem, de je ne sais quel trou*”—and yet there he was, full-blown and finished. So it was, my friend surely would have said, with the elder Story. He came, practically, out of the same hole as Hawthorne, and might to the alien mind have been as great a surprise.

Young Story entered Harvard, of course, and perhaps to appreciate the proper quality of the biographer’s references to his college life one must have known something of it in detail from other sources, which are not wanting. Out of it at any rate sprang Story’s marriage at twenty-three with Miss Emelyn Eldredge, the happiest of unions, and friendships that were to be lifelong with, among others, Charles Sumner and J. R. Lowell, whose young wife also belonged to the sunny circle of these Arcadian days, the vision of which he himself has fixed in his “Fireside Travels.” Our volumes contain many letters from both men, Sumner’s always “going a little large” we may think, but full of the writer’s personality, and Lowell’s gay, sincere, heart-warming, as all things about Lowell seem to be, and of course inveterately punning. Nine years after graduating at Harvard were occupied

in the study and practice of Law by day and all the Arts by night. The Story of the many-editioned "Story on Contracts" was the same Story who sang, danced, made verses, mimicked, painted and modelled, causing the elder folk of Cambridge and Boston to shake their heads over his irresponsibility, and even Lowell to laugh at him (as we have read somewhere) for wishing to be an Admirable Crichton. So that he was thirty, married, and successfully entered upon a legal career before, changing the plan of his life, he settled in Rome, fairly launched on his "long marmorean adventure," as Mr. Henry James calls it.

To continue following the biographic outline, the first stage of that adventure was one of discouragement in his work, which ended with the enthusiastic recognition and purchase for large prices of the Cleopatra and the Libyan Sibyl, already referred to, in the 1862 Exhibition. But these years anchored him in Italy, in spite of one or two attempts to slip away. The correspondence and diaries belonging to them show the rapid widening of interests and friendships that bound the Storys to it. In Florence, a month or two only after sailing from Boston, they met Mr. and Mrs. Browning, who were soon to find and move into Casa Guidi, and there sprang up immediately a warm and intimate attachment between the two households, as one had learned already from Mrs. Browning's published letters. In one of these to Mrs. Jameson, it may be remembered, occurs a touching reference to the death of Story's six-year-old boy, the ache of which loss never was quite removed for the father. The verses entitled "The Sad Country," among his later lyrics, are evidently, as his biographer notes, "the persistent echo, after years, of the least endurable of the writer's bereavements." When the boy took ill his sister was sent over to the

Brownings' house, and there she also was struck down, and for a while lay at death's door. It was this little maid, in her convalescence, whom Thackeray, seated on the edge of her bed, between daylight and dusk, amused by reading, chapter by chapter, his as yet unpublished "The Rose and the Ring." And to the same occasion partly refer the following touching recollections of another visitor:—

Hans Andersen, whose private interest in children and whose ability to charm them were not less marked than his public, knew well his way to the house, as later to Palazzo Barberini (to the neighborhood of which the "Improvisatore" was able even to add a charm); where the small people with whom he played enjoyed, under his spell, the luxury of believing that he kept and treasured—in every case and as a rule—the old tin soldiers and broken toys received by him; in acknowledgment of favors, from impulsive infant hands. Beautiful the queer image of the great benefactor moving about Europe with his accumulations of these relics. Wonderful too our echo of a certain occasion—that of a children's party, later on—when, after he had read out to his young friends "The Ugly Duckling," Browning struck up with "The Pied Piper"; which led to the formation of a grand march through the spacious Barberini apartment, with Story doing his best on a flute in default of bagpipes.

Save Lowell's, no name is so constantly recurring in these pages as the Brownings. Story sends the former a crisp little sketch of them as they appeared to him at the beginning of their acquaintance:—

He . . . straight black hair, small eyes, wide apart, which he twitches constantly together, a smooth face, a slightly aquiline nose, and manners nervous and rapid, . . . has a great vivacity, but not the least humor, some sarcasm, considerable critical faculty, and very great frankness and friendli-

ness of manner and mind. Mrs. Browning used to sit buried up in a large easy-chair, listening and talking very quietly and pleasantly, with nothing of that peculiarity which one would expect from reading her poems . . . her eyes small, her mouth large, she wears a cap and long curls, very unaffected and pleasant and simple-hearted is she, and Browning says "her poems are the least good part of her."

Later on the families are together for long periods, at the Baths of Lucca, for instance, and at Siena and Rome. Browning, his wife writes, has taken to modelling under Story at his studio, and "is making extraordinary progress." That was in the autumn before her death, of which Story writes to C. E. Norton in language that shows how deeply he was affected. "Never did I see any one whose brow the world hurried and crowded so to crown, who had so little vanity and so much pure humility." Touching Mrs. Browning's passion in the cause of Italy, Mr. James asks how it is that it should not leave us in a less disturbed degree the benefit of all the moral beauty, and answers himself in this searching passage:—

We wonder at the anomaly, wonder why we are even perhaps slightly irritated, and end by asking ourselves if it be not because her admirable mind, otherwise splendidly exhibited, has inclined us to look in her for that saving and sacred sense of proportion, of the free and blessed *general*, that great poets, that genius and the high range of genius, give us the impression of even in emotion and passion, even in pleading a cause and calling on the gods. Mrs. Browning's sense of the general had all run, where the loosening of the Italian knot, the character of Napoleon III., the magnanimity of France and the abjection of England were involved, to the strained and the strenuous—a possession, by the subject, riding her to death, that almost prompts us at times to ask wherein it

so greatly concerned her. It concerned her of course as it concerned all near witnesses and lovers of justice, but the effect of her insistent voice and fixed eye is to make us somehow feel that justice is, after all, of human things, has something of the convenient looseness of humanity about it—so that we are uneasy, in short, till we have recognized the ground of our critical reaction. It would seem to be this ground, exactly, that makes the case an example. Monstrous as the observation may sound in its crudity, we absolutely feel the beautiful mind and the high gift discredited by their engrossment. We say, roughly, that this is what becomes of distinguished spirits when they fail to keep above. The cause of Italy was, obviously, for Mrs. Browning, as high aloft as any object of interest could be; but that was only because she had let down, as it were, her inspiration and her poetic pitch. They suffered for it sadly—the permission of which, conscious or unconscious, is on the part of the poet, on the part of the beautiful mind, ever to be judged (by any critic with any sense of the real) as the unpardonable sin. That is our complaint: the clear stream runs thick; the real superiority pays; we are less edified than we ought to be. Which is, perhaps, after all, not a very graceful point to make (though it must stand). . . .

With Browning himself the Storys kept up a close friendship until his death, and their later correspondence echoes the "felicities and prosperities" which attended the rich and ample period of his life "that cast the comparatively idyllic Italian time into the background, and seemed superficially to build it out." One of his letters to them full of London news tells of Thackeray's resignation of the editorship of "The Cornhill" and that it has been offered to himself. Mr. James is nowhere else so felicitous as in his explanation of this transformation to "the wonderful Browning we were so largely afterwards to know—the ac-

complished, saturated, sane, sound man of the London world and the world of culture":—

The poet and the "member of society" were, in a word, dissociated in him as they can rarely elsewhere have been; so that, for the observer impressed with this oddity, the image I began by using quite of necessity completed itself: the wall that built out the idyll (as we call it for convenience), of which memory and imagination were virtually composed for him, stood there behind him solidly enough, but subject to his privilege of living almost equally on both sides of it. It contained an invisible door through which, working the lock at will, he could softly pass, and of which he kept the golden key—carrying the same about with him even in the pocket of his dinner-waistcoat, yet even in his most splendid expansions showing it, happy man, to none. Such at least was the appearance he could repeatedly conjure up to a deep and mystified admirer.

In these earlier years came excursions into Austria and Germany, visits to Paris and London, and to the old Bostonian circle, all fruitful in entertaining records. Story's pen illustrates his roving interests and the keenness of his romantic sense. It can turn off a comical portrait, too, with a few strokes in the grotesque. One of Neander, in a letter to Lowell from Berlin, has a story attached of how the German great man arrived home one day complaining of being lame and of having had to hobble along the streets. He had no pain, but he *was* lame, for he had hobbled all the way home. His sister and next a physician examined him, finding nothing wrong. Still, he insisted that lame he was, for he *had* hobbled. All were in perplexity, till some one who had seen him returning solved the mystery by stating that he had walked home with one foot in the gutter and one on the sidewalk!

Mrs. Story's pen as well as her husband's is busy with great effect about their London experiences. There is a morning concert at the Opera, with Pasta, Castellan, Viardot, Tamburini, Mario, Ronconi, and Grisi—surely an incomparable constellation. Story dines with John Forster, and meets Talfourd, a man "with the keenness of polish and education," but not elegant at all—he ate with his knife! Hardwick tells a story about Turner eating shrimps out of the lap of an old woman, with his back turned upon a glorious sunset, which his companions are watching with delight. Nature was creeping up, he, too, might have explained. An "evening at Mrs. Proctor's" is the signal for one of Mr. James's most successful evocations. "Perpetuator, for our age, of the tone of an age not ours," that lady is for him historic, not merely in the superficial sense of her associations and accretions, "but in the finer one of her being such a character, such a figure, as the generations appear pretty well to have ceased to produce. It was her tone that was her value and her identity, and that kept her from being feebly modern; her sharpness of outline was in *that* in the absence there of the little modern mercies, muddlements, confusions and compromises." But the reader must go to Mr. James's pages themselves to see how this ghost walks again at his summons.

One other shade among the many called up from these earlier years must not slip by unobserved. When Browning, as has been often told, found Walter Savage Landor in a Florence Inn, a broken-down, poor, houseless old man, it was to Siena, beside the Storys, that he brought him. Mrs. Story jotted down her recollections of their neighbor and of his table-talk, from which, with a regret that we may not extract more, we take these two plums, not the juiciest by any means:—

"I once sat next Lady Stowell at dinner [Landor is speaking], and I asked her to take wine, after trying to engage her in talk. 'For the love of God let me alone and don't bother me so, Mr. Landor,' says she; 'I don't know what I'm eating.' 'Well, my lady,' said I, 'you're a long time making the acquaintance': for she ate like a tiger and in great quantity. . . . I met Tom Paine once at dinner—his face blotched and his hands unsteady with the wine he took. The host gave him a glass of brandy, and he talked very well; an acute reasoner, in fact a monstrous clever man. I went at that time into very grand company, but as I was a young man some of my relations who wanted to put me down said, 'Well, we hear you know Tom Paine—Citizen Paine we suppose you call him, with your ideas.' 'To persons with *your* ideas I call him *Mister* Paine,' says I."

We are left little space in which to follow Story through the second stage of his career; but that matters less, because it was one of general serenity, and a general serenity, as Mr. James says, gives small advantage to the biographer. "Happiness eludes us, and Story was as happy as a man could be who was doing on the whole what he liked, what he loved, and to whom the gods had shown jealousy but in the one cruel occasion of the death of his eldest boy." The English public, (with its objection to the nude, on which Mr. James descants divertingly) had surrendered to his interesting gift in sculpture, and had readily proclaimed it genius; and he was, in time, to overcome the American view of himself as "only a poetaster, dilettante, and amateur," which he complains of in his earlier letters. That view was entirely erroneous, no doubt, yet there were in Story's case elements that make the error at least understandable. It was, after all, by an accident that sculpture became his particular work, and not engaging in it, seriously at least, as we have seen, un-

til he was nearing middle life, he suffered in never having served an apprenticeship. A plain power of hard work, among other things, assisted him to make up to some extent for the rigor of technical education which he had missed; but, again, his energy was dissipated over a too varied field of interests. It drove him into every kind of literary experiment and speculation. He used to say: "Sculptors profess much admiration of my writings, and poets amiably admit that my great talent lies in sculpture." Such, ever, is the fate of the Admirable Crichton, and that Story was likely to play that rôle, without pose, indeed, and unconsciously, except in the intense consciousness of his interest in everything, Lowell appears to have detected in their college days together. "Full of all sorts of various talent" is Mrs. Browning's description of him in one of her letters to Mrs. Martin. "Not with the last intensity a sculptor," says his present biographer, and continues: "he was as addicted to poetry as if he had never dreamed of a statue, and as addicted to statues as if he were unable to turn a verse. . . . It was, æsthetically speaking, a wonderful sociability."

We are getting nearer the "rather odd case," Story's particular exhibition of the "famous 'artistic temperament,'" which, as we have remarked earlier, Mr. James sifts so shrewdly, and with such an interest as one of his own creations might inspire in him. The results, taken together, are an admirable contribution to criticism, at which we can do no more than hint. Insistence, he says,—meaning by that the act of throwing the whole weight of the mind, and of gathering it at a particular point (when the particular point is worth it) in order to do so—is on the part of artists who are single in spirit an instinct and a necessity, and the principal sign we know them by. "They

feel unsafe, uncertain, exposed, unless the spirit, such as it is, is, at the point in question, 'all there.' And Story, restlessly and sincerely æsthetic, was yet constitutionally lacking in this insistence. It is the biographer's point too, that, in regard at least to the want of it in his literary work, it was of all places least likely to be supplied in "the golden air" of Italy. "Subjects float by, in Italy, as the fish in the sea may be supposed to float by a merman, who doubtless puts out a hand from time to time to grasp, for curiosity, some particularly iridescent specimen. But he has conceivably not the proper detachment for full appreciation." In an air less golden, so little golden even as Story found that of Boston to be when he revisited it, the picturesque subject might more readily have yielded all its inspiration. This latter stage of the career we have been following was one of entire felicity; but there exists regarding it the question whether the felicity had not to be paid for. "It is for all the world as if there were always, for however earnest a man, some seed of danger in consciously planning for happiness, and a seed quite capable of sprouting even when the plan has succeeded. Such at any rate is the moral, not too solemnly expounded, which the biographer finds suggested by the artistic "case" which he so intimately displays to us.

Our intention, we hope not entirely unrealized, has been to indicate the variety of these fascinating volumes, which we believe will take a high place among Mr. James's works. Story, with his relish of life, his good talk, on the topic of the day or on any other, his powers of mimicry, his notable prejudices, his stores of knowledge and especially of impressions of Rome, an altogether charming and sprightly personality, appears in the circle of his friends, themselves in many cases among the finest spirits of their time.

A loyal but wonderfully intimate and searching critic is at our ear as we watch him at work. The evoked group is placed against the background of the Italy of a departed golden age; "the vanished society," in its pride and pathos, and the air in all the goldenness of its appeal to Mr. James himself, are recovered by him with all his art of suggestion. The whole canvas is brushed with extraordinary delicacy and finesse. We cannot resist anticipating the pleasure of the reader with one more passage; especially as it touches on a subject to which the writer constantly returns,—the fluctuation of taste. Story in his German diary records having seen a ballet at the Berlin opera, "in which Marie Taglioni, a woman whose ankles were as great as her name, flung herself about clumsily enough."

"But for this untoward stroke [Mr. James comments] we might have invited Marie Taglioni to flit across our stage, on the points of those toes that we expected never to see compromised, as one of our supernumerary ghosts: in the light, that is, of our own belated remembrance, a remembrance deferred to the years in which, as a very ugly and crooked little old woman, of the type of the superannuated 'companion,' or of the retired and pensioned German governess, she sometimes dined out, in humane houses in London, and there indeed, it must be confessed, ministered not a little to wonderment as to what could have been the secret of her renown, the mystery of her grace, the truth, in fine, of her case. Her case was in fact really interesting, for the sensitive spectator, as a contribution to the eternal haunting question of the validity, the veracity from one generation to another, of social and other legend, and it could easily, in the good lady's presence, start a train of speculations—almost one indeed of direct inquiry. The possibilities were numerous—how were they to be sifted? Were our fathers benighted, were ravage and deformity

only triumphant, or, most possibly of all, was history in general simply a fraud? For the Sylphide had been, it appeared, if not the idol of the nations, like certain great singers, at least the delight of many publics, and had represented physical grace to the world of her time. She had beguiled Austrian magnates even to the matrimonial altar, and had acquired, as a climax of prosperity, an old palace, pointed out

Blackwood's Magazine.

to the impressed stranger, in Venice. The light of testimony in the London winter fogs was, at the best, indirect, and still left the legend, at the worst, one of the celebrated legs, so often in the past precisely serving as a solitary support, to stand on. But to read, after all, that she flung herself about, with thick ankles, 'clumsily enough,' is to rub one's eyes and sigh—'Oh history, oh mystery!'—and give it up."

TWENTY YEARS ON.

Abbott's Ferry was at its sleepest one early June afternoon when the 3.50 train from London pulled up at the station. The passengers—red-faced, dusty farmers mostly, with a sprinkling of local tradesmen—filed past the collector; but one man stood for a few minutes on the platform, gazing back along the shining metals that led to the great city. He was nearing the forties; a shabby man in garments that shone with age, with frayed linen and boots worn even beyond the cobbler's art. He gazed curiously down the long road by which he had travelled; then, as the train moved on, followed it with his eyes until it plunged into the green woods towards Camford.

A sleepy old white horse—still a white horse, and sleepy—dragged a brace of carriages up and down a rusty siding, the man with the whip nodding by its side. That business seemed never-ending; one remembered the "clank-clank" breaking the silent nights of long ago. With an effort the passenger turned, glanced again towards London, and passed out of the station.

The farmers' carts had driven off; but a tall footman was closing the door of a brougham, shutting in the only first-class passenger. The shabby man glanced listlessly at the arms on the

panel and looked again at the occupant more keenly. "Young Lister," he muttered. "Put on flesh a bit, but the moustache doesn't alter him out of knowledge. He's squire now, I suppose. Ah, well!"

The fierce June sun brought out that smell of hops and burnt bricks which would build up Abbott's Ferry again before the eyes of a blind man who had once known it. The passenger walked slowly over the little humped-up bridge under which the Stott, exhausted by summer heat, sprawled over its stones. Three minutes brought him into the High Street. It is a queer, old-fashioned street, this High Street of Abbott's Ferry, with red-tiled roofs and quaint gables and old signs and curious twists and corners and kinks in it, with steps here and there and steep narrow little lanes leading to tumble-down cottages which hang to the hillside as if for dear life. That High Street, with its nodding houses, looked as if it had fallen asleep some centuries ago one hot summer's afternoon like this, and never wakened.

The visitor loitered on, his eyes glancing from side to side; now peering into a dark little shop whose keeper looked as if such a thing as a customer would have seriously disconcerted him; now

pausing before a hoarding with ancient notices of swine fever or a sun-scorched placard of some entertainment whose lights had long gone out. He repeated to himself the names over the shops, and stopped below every blistered, faded sign to gaze up at it. The battered old archer, beplumed and green-coated, still stood with the un-shot arrow in the bow above the Robin Hood. The traveller passed the inn once; then, with a furtive glance and nervous fingers seeking his lips, he entered and called for spirits.

The wife of the inn-keeper, a buxom woman with beautiful red-gold hair that caught the sunlight filtering in through the narrow doorway, touched some forgotten chord. He watched her as she went briskly about her work; here in the inn they were busy. That confectioner's—what was the name? Glasscopp—Glasscott? Hazy memories pieced themselves together. A farmyard on the Camford Road; a drowsy afternoon like this, but Sunday—yes, it was Sunday; a boy and a girl with gold-red hair sitting on a gate watching the gobbling pigs and strutting fowls. They walked home through the woods; ah, and paddled in the Stott shallows on their way, and he was late to roll-call.

The visitor opened his mouth to speak, then drank, opened it again, and began huskily, "Weren't you—"

"Another?" she said, whisking up his glass and returning it. Well, she and he were out of the "green enchanted forest of childhood." Mistress of the Robin Hood was she? The little golden-haired girl at Glasscott's!

He paid for the drinks, changing a last coin, and stepped out into the golden sunlight. He was scarcely down the three steps that led from the Robin Hood door to the High Street when his heart gave a queer little jump. Strange that a man in cap and gown swinging through the street

should startle him so "twenty years on!"

Turning down a narrow lane he found himself in a lime-avenue leading to the close in front of the old gray church. Here was the house—how well he remembered the wide bow-window—where, on that snowy first Sunday, his form-master entertained him and three other shy new boys at tea in his rooms. He remembered their shyness melting like the butter on the muffins until, when the church bells pealed out and early people in stiff Sunday black came hurrying or hobbling past the window, the boys were all chatting as noisily as if they had known each other for years, and the master himself was not the awful being of week-days armed with powers of high justice and of low.

The church, with its old hatchments and crumbling monuments, smelt musty as of yore. He passed through the narrow path between the railed-in graves; the familiar names on the shop-fronts recurred; whole families of the dead and gone who had moved from the gabled houses to the last resting-places. Some out of the forgotten faces rose before him. Here lay old Gooch the hatter; he remembered him well, red-faced, with a little beaked nose and rising plume of very white hair; "Polly" Gooch the boys used to call him. This was the vicar's wife, then; died fifteen years back, eh! A kind, buxom, jovial little lady. Crimp, of the mill, should have made older bones; and here was the shadow of a cloud dancing on the sour old doctor's grave; and the undertaker had gone to the long home he had carried so many tap-room cronies to.

One tombstone, nearly grown over with long grass, he remembered. "In Loving Memory of Charles Durham Sergeant, only son of Captain Durham Sergeant, R.N., accidentally drowned while bathing in the River Stott, July

3rd, 187-, aged 15." The long forgotten day; the restless cattle behind their hurdles in the market-place; the smell of the tarred door leading to the bathing sheds and the cool river and the floating weeds; the sudden frightened cry; and a few days later the boys clustering bareheaded round the open grave, all came back to him. Well, kindly earth had hidden this old sorrow, and Captain Durham Sergeant lay beside his boy. Truly—

The ways of death are soothing and serene,
And all her words are peace.

From the churchyard the road climbs steadily through overhanging curtains of foliage towards the school, nearly on the crest of the hill. For a minute or two he paused at the gate of the drive. Two boys on bicycles, towels round their necks, their faces flushed with health, nearly ran him down, and flung a laughing apology as they passed.

"Now then," wheezed a peevish voice behind him, "don't get a-hanging about here. T'other gate up the lane is the tradesmen's entrance."

The visitor flushed angrily, then turned on his heel. After all, what could he expect? It was Marson, sure enough; whiter and more wrinkled than of old, more crabbed, perhaps, and crustier, and with the gingerly rheumatic walk more pronounced. The fellow had called him "sir" once, and cringed for tips twenty years back.

He turned up the narrow deeply-rutted lane which passes the master's garden and the long line of red offices with the tradesmen's entrance in their midst. Near the top of the lane he climbed a stile into a field, and, crossing it, flung himself down on the thick grass of a sloping meadow.

The school lay like a map below him, every detail picked out by the bright sunshine. His eyes drank in everything;

the huddle of red-tiled buildings; the old familiar doorways and tiny study windows; the wood-paved quadrangle; the master's house and garden; the drive winding to the gates; the playing fields dotted with cricketers at the nets; the hospital in the fir plantation sending a little curling wisp of smoke into the blue sky; the great elms at the border of the grounds with the rooks cawing and circling round them.

For a long time he lay in the lush grass, and looked at the little school-city below, and the white ribbon of road leading down the hill into the town. Old memories thronged into his mind. Every foot of ground had its history. Over there his fight with Firth had taken place, which with a minute's more staying power he might have won. Under the elms the famous battle against the townies, who invaded the school-ground through the adjoining fields, had been fought. On that old tree-trunk, "Diggy" Grant and he had often talked about their future in the long summer evenings. Sir Digory Grant now—and he?

As he looked down from the hillside meadow, he looked down also upon his life. A strange business he had made of it; a sorry business. Plainly enough now he could see the right road and the wrong turnings. It began down there with a small success; strange that all through life his successes, not his failures, had played him false. They had loosened his hold of the old stern law of duty in little things as in great; they had raised him on an unstable pinnacle above the firm ground of honest work. Well, the pinnacle had fallen at last and left him wounded past help.

He was tired of life, utterly tired; too tired even to wish that the start might come once more and the years, flashing back, leave him a boy again. A long sleep and endless was all he asked for; that God would check his

trumpeters at the last and leave the dust that sinned ages back with the wrack and ruin of the worlds. Feeling in his tattered pocket, he drew out a little weapon of shining metal. Strange that death could lurk in so tiny a hiding-place, ready to spring out at a touch of the finger!

He had chosen a pleasant place and a pleasant time. Under the blue June sky, with the old school below him, the cawing of rooks and hum of insects in his ears, and the sweet clean grasses near him, death lost most of its terrors. He shivered a little, though the sun was hot, and raised the weapon. The barrel clicked round, offering two empty chambers to the needle. Death lay in the third.

Just as he was pressing the trigger again a stir in the neighboring hedge stayed his hand. A boy's voice, sharp and clear, broke the droning silence.

"I say, Brown, look out. You'll squash the little beggar. Mind those thundering hoofs of yours. You'll break its other leg, if you're not careful."

"It's all right. I know what I'm about. There—you've got it. Put your cap over it, you idiot. Look out, Dick, it's going through the hedge."

There was a flutter among the leaves, and the next minute a yellow-hammer, with one tiny leg twisted and broken, struggled through a gap in the hedge and lay quivering in the grass. A boy of about fourteen leapt over the hedge, escaping the stranger only by an inch or two.

"Oh, I beg your pardon!" he exclaimed, doffing his cap instinctively.

The man slipped the weapon into his pocket unobserved.

"A—a yellow-hammer?" he stammered.

"Yes, the poor little beggar's leg's broken, I think. We found it the other side of the hedge, fluttering about; it's no use leaving it here to get killed.

Old Jim'd be sure to find it and gobble it for his supper."

"The matron's cat," explained the second boy, joining his companion. "He's always prowling round the hedge."

The man joined in the wounded bird's capture, which was soon effected. One of the boys held it gently between his palms, a little quivering ball of fluffy feathers, with frightened, bead-like eyes.

"Make a splint out of a twig, Dick," he said.

Between the three of them, sitting on the grass, the delicate little surgical operation was soon performed.

"I suppose you're going to give it asylum till it can fly again?" the man asked.

"Yes, sir."

The "sir" pleased him—a tribute to his voice and manner, for his clothes, frayed and stained in the common lodging-houses of London, cried his poverty to all the world.

"There's an old empty linnet-cage in our study. We'll keep it there till it gets right."

"But does the Head let you keep pets now?"

Dick and his friend looked at each other and fidgetted. "Well, he doesn't exactly," Dick answered. They aren't very particular with study fellows, though. Some of the kids took to keeping white rats and things in their desks and there was a bit of a row about that."

"Symes junior's owl gave the show away. Just fancy trying to keep an owl in a desk!" said Brown reflectively, ruffling the little yellow waistcoat of his captive with a delicate finger.

"Rather a kinky thing to do," agreed the stranger; and in one word, with the least intention in the world, revealed the fact that he had been at Abbott's Ferry. For "kinky" is a word

that has signified "odd or eccentric" at the school for generations.

"Were you at the school, sir?" asked Brown.

For a moment the stranger hesitated. "Twenty years back," he said.

"I suppose it's changed a lot since then?" Dick asked.

"Not so much as I expected. That block of buildings is new."

"Science buildings. They were opened in my first term."

"The cinder-track's new too, and they didn't have bicycles in my time. That's all, I think, except for the people. I see Marson's here still. I suppose he's the only one left?"

"Mr. Ransome's been here a good while."

"After my time, though. Is Bathurst still here? Or Kellaway?"

He ran over a list of old masters and servants; some were dead, some just names held by tradition; two or three still lived at the school; most had passed even out of memory.

There was an awkward little pause. Dick took up the conversation, jerking out:

"Marson's singing to-night, sir."

"To-night?"

"Yes, the scratch concert. I don't suppose many old boys'll be here, though. They generally come by morning trains. A few have turned up. A good many have entered their names for to-morrow."

"What happens to-morrow, then?"

"Why, the sports, sir. Didn't you come down for them?"

They discussed the morrow's doings for a time; then the stream of talk ran dry. Awkwardly the boys rose to go.

"Have you been over the buildings yet, sir? I—I—don't"—Dick looked awkwardly at Brown. "We're just going to have tea; I don't know whether you'd mind coming to tea with us? We should like it awfully."

Brown seconded the invitation.

A refusal was at the tip of the stranger's tongue; then an apology for his clothes. The thought of that old rabbit-warren of a building, the rambling study-house that had rung once with his shouts and laughter, silenced them. After all, the studies were near at hand; he could come and go almost unobserved. Together the three entered the school grounds, and clattered up the rickety stairs. Dick flung open a door, thrust aside a curtain—the cozy little study, with its tiny barred window, its cushioned chairs, its litter of tattered school books and papers, its prints and photos and cricket bats and racquets—the typical boy's study—was before him. He flushed with pleasure as they turned in the doorway, and Dick and his companion transferred their captive to the cage.

"Why, why," he gasped, "it's my old study!" Deep-cut in a beam was his name; beside it, that of the chum who had shared the study with him. He fingered the inscriptions lovingly. "My old study! What times we had here, by Jove!"

Dick and Brown lit a spirit stove, put on a kettle, warmed a tea-pot, and set cups, saucers, plates, bread and butter, and pots of jam in order.

The stranger was still fingering the inscriptions. "You don't happen—I don't suppose you've happened," he said, "to have heard of Duncombe, the man who's here?" He tapped the beam. "He went into the army; but I lost touch with him."

"Why, his portrait's in the hall," said Dick, from a cupboard. "Didn't you hear? It's in one of these papers, I think." Dick picked up a bundle, and ran through them hurriedly—old copies of the school magazine.

"This is it," he said.

The stranger scanned print enclosed in black lines. "Poor old chap—poor old Jimmy Duncombe," he murmured at last.

"Jolly plucky thing," said Dick a little nervously, with his cheeks glowing. "There were five to one, but he wouldn't give in, and died fighting. Patrickson was with him; he was badly wounded. Got his captaincy over it, you know. Well, Patrickson came down when he was better to see the Head—you bet we gave him a good show—and he told us Major Duncombe kept on fighting even while he was delirious and dying; gasping out, 'Go it, Ferry; no surrender,' as if he was playing footer again; till he dropped dead." Pride in his school and its hero rang out in Dick's tones.

"So he wouldn't give in, eh?" said the stranger. "Poor old Jimmy." Across the years, Duncombe's "Go it, Ferry, no surrender," on old fields of harmless battle, rang again in his ears.

They had tea, and after it the stranger, sitting in the seat of honor, glanced through the school papers, asking question after question about old ghosts who were taking shape again, boys he had known long since, who were doing their country's work, and the world's work, and the school's work, bearing the heat and burden of the day, and declining to "give in" against the heavy odds of life.

Over the school grounds soft twilight fell; lights twinkled out; in the dusk bats brushed past the little study windows as they had done on old-time summer evenings—his heart remembered how.

"You'll come in to the concert? There's the first bell," said Dick at last. "We're in the choir, Jack and I, so I suppose we ought really to go."

The visitor held out his hand "I'm afraid I'm scarcely presentable enough for the concert; I didn't come prepared," he said with an uneasy laugh. "It was kind of you to give me tea." He hesitated. "Very kind," he went on, huskily, dropping his voice,

"shabby clothes and empty pockets don't bring many friends, as I found long since. Like Duncombe, I've had to do my fighting against odds, and I'm afraid I haven't always remembered the old school cry. It's a good cry to remember, though. There, I'm not going to preach. Thank you again, my lads; you've doctored more than the broken leg to-day. Goodbye, and God bless you."

The boys waited awkwardly for a moment; looked at each other, and whispered.

"We—we—I hope you won't think it very—" Dick grew red, stammered, and waited for Brown to go on.

"Fact is," said Brown, and, growing to beetroot color, rushed at his offer, "Dick and I are rather in funds now, and—and—we thought if you didn't mind us lending—chaps often do in the school—a—"

"No, no, no, my lads," said the visitor hastily. "Thanks all the same. There's the bell again. I'll wait here, if you don't mind, till the people are in. Goodbye again."

He waited till school, old boys and townfolk were assembled in the hall, and the masters had crossed the quadrangle in solemn procession.

Then, standing under one of the ivy-mantled windows of the hall, he listened while the school song rang out, and heard Dick sing a solo, not very well, in a treble that was near breaking. Then Marson, in a voice shakier than of old, sang that famously pathetic ditty, "Down in the Valley below," which brought screams of laughter from the boys, and tears of indignation from the singer. Marson's pathos always brought laughter, while his humorous songs drew tears and sniffs and sobs. The old porter cheered up visibly at an encore being demanded, and gave "The Light Brigade," bringing down the house with "joys of death," an unlucky slip for jaws.

As the stranger turned to leave the school, the Soldiers' Chorus from "Faust" thundered out. How the boys shouted it, and how the school band threw themselves heart and soul into the stirring strains!

Glory and love to the men of old,
Their sons may copy their virtues bold,
Courage in heart and a sword in hand,
Ready to fight or ready to die for
Fatherland.

Why, the smallest boy in the lowest form had his head flung back, and his chest out, and fancied himself on the battlefield facing countless odds, yet scorning surrender.

Who needs bidding to dare by a trumpet blown,
Who lacks pity to spare when the field is won?
Who would fly from a foe if alone or last,
And boast he was true as coward might do when peril is past?

The stirring words of the refrain followed him down the drive, under the arching trees—

Glory and love to the men of old,
Their sons may copy their virtues bold,
Courage in heart—

Courage in heart!

Temple Bar.

He passed through the churchyard path where young lovers walked arm in arm through the ranks of the sleeping dead; reached the High Street, and turned into a little shop just before the shutters hid its mingled stock of plate, musical instruments, china, bronze and cutlery. A little haggling left the revolver in the broker's hand, and a few shillings in his. Enough for the rail now, and for another day's battle!

On Abbott's Ferry platform he watched the jewelled lights rise and fall in the darkness, at the touch of distant magicians, until at last the glaring eyes of his train drew near. "London only," roared the guard; he took his place, bound for the front again, for the great battlefield where victory might still be won by the stout of heart. He leant out of the window as they passed the old white horse still at his work on the siding; *clank-clank-clank* went the coupling trucks, with a new and more cheerful sound. They thundered over the dark river. High on the hill-side the school lights gleamed through the trees.

"Courage in heart! Courage in heart!" The refrain rang in his ears, and with it the death-cry of old Duncombe, torn by a score of bullets in a land very far off—"Go it, Ferry—No Surrender!"

Lucian Sorrel.

"THE DELETERIOUS EFFECT OF AMERICANIZATION UPON WOMAN."

Victrix causa Deis placuit. It is obvious indeed that the gods are on the side of the biggest battalions. Otherwise the whole purpose of history, whatever that may be, would be a monstrous jest, in which, however, it would be difficult to discern any satisfactory sense of humor. Yet that

history must be understood to signify a final, or ultimate, triumph, and not necessarily the result of any intermediate battle, however remarkable and signal. It is, of course, impracticable for us to stand on some Pisgah and survey the goal of human progress as through a telescope. At most we can

make out things but a little way ahead, and often not even that. The impenetrable mists of fate envelop the horizon, as they have swallowed up also the unrecorded past.

The impossibility of determining the eventual goal of human evolution should make us chary of prophecy, even over small periods of time, but it should not paralyze intellectual investigations into the future. After all, we have the records and experience of some thousands of years, in a more or less completed form, and we may certainly argue from redoubt to redoubt, as it were. At great cost—human blood and human tears—we have advanced our forces against the forces of the night, and these hardly-won points of vantage are not to be lightly abandoned. The common ground of logic is irrefragable, founded as it is on the simplest laws of nature; and we may well engage in feeling our way by its means still farther ahead. What lies in the mist matters not; that which is our concern is the visible battlefield. A survey of the historical period of human evolution discloses a series of abrupt changes to the philosophical observer. These are fairly familiar to all. The civilizations of the Orient perished in succession; on them followed the Aryan civilizations of Greece and Rome. Later the course of history was changed by the swamping of Europe by the fair Northern races, and it was not until the Renaissance that Europe reached the point at which civilization had been dropped at least twelve hundred years before. During all those centuries, although Aryan Europe had been heterogeneous, and although her political conditions varied, the sundry nations and races had remained at the same level, because subject to the same influences. Indeed, the feudal system practically achieved a kind of homogeneity, in Western Europe at any rate. The

same ideals moved the Frenchman, the Englishman, and the German. Their forms of government might be different, they might practise varying religions; but they were involved in the same stage of evolution and kept pace roughly with each other. The formulas of feudalism are well known. It involved a system of caste which, while not very rigid, mapped out the nation with exemplary thoroughness. The caste system, as in force among Eastern nations, never had its counterpart in the West. Elasticity, greater or less, has always characterized the social divisions of Europe, because those social conditions are social, and not religious. Even hierarchies in the West have never effected an Oriental system of caste, and the nearest approach to one was probably reached in the segregating conditions just prior to the French Revolution, which were the product of class arrogance.

Class then has never passed into caste in this western part of the world. But feudalism established the boundaries of class pretty firmly. Society was organized on a military basis, and kings looked for service from nobles, nobles from their feudatories, and these feudatories from the churls and peasants of their demesnes. As a practical system it was nearly perfect, certainly more perfect than any system before or since devised by the ingenuity of man. It was, however, arranged for a pastoral and agricultural country, and with the passage of the various European nations into mercantile communities feudalism was necessarily dissolved. This naturally took place first in England, where the rules and distinctions had been less severe than on the Continent, partly owing to the character of the people, and partly owing to the public spirit of the barons. The revolution was not accomplished without disorder, and was assisted by the bloody conflicts

of the Roses which broke up the power of the nobles; but on the whole it may be regarded as a silent revolution, and it was not completed for many centuries.

With the rise of trade began a new era in modern civilization, an era to which I shall refer presently. In the meantime it is necessary to remark shortly the general effect of the feudal system on human character and human conduct. It is manifest that a system which in the ultimate appeal rested on militarism and the strong arm must have differed greatly from that which obtains to-day. Wealth was not a consideration, since authority had its seat in the prestige of fighting qualities. A great noble was respected and feared and courted, because he could put into the field so many men-at-arms with esquires and captains. This was not a question of money, but of territorial lordship. Wealth might possibly buy over this baron or that baron to one interest or another, but the chances were rather in favor of their being influenced by ambition only. In any case the machinery of feudalism moved independently of money. Hotspur and the Percies quarrelled with Henry the Fourth and raised the standard of insurrection, because they considered the King had slighted their House. And Hotspur marched on his fate with 15,000 men.

The mental properties evolved by this atmosphere were clearly strenuous and manly, whatever was the walk of life. All classes were called upon to bear arms, which should develop their physique and render them of a healthy robustness; and to this feudal age must be attributed such qualities as are common to perpetual warfare, for example bravery, obedience, quickness of decision, endurance, stoutness of frame, and certain generous instincts that seem to thrive in martial air. On the

other hand, they had the defects due to the same conditions.

Trade did not make good its claims to the attention and respect of the world until the nineteenth century. It might have done so earlier, at least in England, had it not been for the interruption of the eighteenth century. Progress, so far as we know it, consists of ebb and flow, and the eighteenth century was a period of ebb, during which the demarcation of the classes was more distinct than had ever been the case. Sir Walter Besant has pointed out that, whereas up to the close of the seventeenth century it was a common practice to send younger sons of gentlemen into trade, during the next century this habit dropped altogether. The city and the gentry were two separate communities, which did not mix, and which were actuated by mutual antagonism. It was not until the destruction of the Napoleonic system gave Europe breathing space and leave to look about and reckon up the results of those twenty years of warfare that trade finally challenged consideration. That was precisely one of the changes which Europe had to reckon up. After Waterloo, trade advanced in influence and prestige. In England it made particular strides, and the reign of Victoria may be said with little exaggeration to be the reign of trade. Trade undoubtedly has had its victories. It has lacked those trappings of gilt and glory, and those romantic traditions, which belong to militarism; but in despite of these defects it has achieved much and advanced greatly in social consideration. Trade indeed has taken to itself wings, and from its pinnacle is engaged in looking down upon the decaying military systems of Europe. There has even crept into the pursuit of it a kind of romance which emulates the older romantic glory. With the invention of that phrase and that fact,

"merchant princes," the aspect of trade was formidably changed. It took a new standing, put on fresh habiliments, and began to swagger among its ancient superiors in the guise of an equal. One can imagine (if they ever saw it with clear prophetic eyes) how our fathers stared in dismay and chagrin at this ugly invasion. The ranks of the aristocracy were broken, a press of newcomers poured in and would take no denial. The whole face of society changed. Nay, more than that; for if the case be examined rightly it is clear that the whole of modern civilization felt the shock. The *real* revolution, which was only adumbrated in the French Revolution, had begun.

In Great Britain, at any rate, the enfranchisement of trade consequent upon the Napoleonic wars and England's undisputed command of the sea was followed with vast national prosperity. English people have been so long accustomed to congratulate themselves on the blessings of the Victorian Age that it has become a commonplace. Napoleon called us a "nation of shopkeepers," and we are now proud of the title. It was by our trade, we boast, that we saved Europe from the tyrant. Trade in the wake of the adventurer has scattered the British flag into all quarters of the globe, has founded an Oriental empire, and established strong young nations overseas. If these feats were indeed the work of trade, there would be reason enough to be thankful. But it is not wholly clear that the expansion of trade is altogether responsible for these conditions. It synchronized with them, but it did not produce them. Indeed, it is more true that the conditions produced the expansion of trade, although it cannot be disputed that trade interacted on the extension of the British Empire. My point is, however, that trade did not make the British Empire. There is

no more fallacious idea current in this country than the belief that the Victorian Era was the sovereign epoch in the history of the British nation. It was the centuries preceding, the centuries which came to their grand climacteric at Waterloo, the centuries which decided the international struggle in Europe—it is they that deserve the epithet and the credit. The nineteenth century merely inherited what had been earned by its predecessors. What in Great Britain Pitt and Chatham rendered possible, Melbourne and Palmerston enjoyed in comfort. There is no more misleading phrase than that of "the glorious Victorian Era," for in the Victorian Era the English people turned smug and complacent and self-satisfied, having entered into the inheritance won by their hard-fighting fathers. Wealth and orthodoxy became the standard, and heterodox ideas, which, after all, have been the basis of all progress and of every fresh discovery, were discarded.

It would seem, then, that the victories of trade are not, in this direction, all that its advocates claim. Here it will be advantageous, as in the case of militarism, to make inquiry into the influences of a *régime* of trade on human character and conduct. For good or ill the old order is passing; has, indeed, quite passed in the United States of America and in the British Colonies, and it is well to "take stock" of the new. The main distinction between aristocracy and trade had been founded on money. The landowning classes inherited their money and did not make it. The commercial classes earned it by traffic. The recognition of trade at once weakened this distinction, and has practically destroyed it by now. But with this breaking-down of the barriers and this growing accessibility of the upper classes dawned the age of the snob. Snobbery was the product of the nineteenth century, the

fungus, that is, on the enfranchisement of trade. So far, it is not clear that we have made a good exchange in stepping into the new era. But what other results are obvious? The agglomeration of masses of humanity into large cities has been the direct result of the commercial epoch, and this had kept pace with a physical degeneration, noticeable in spite of improved sanitary science. This is a definite disadvantage which seems likely to continue under the commercial régime. It has been often stated that modern life, in its freedom from the dangers and tyrannies of mediæval conditions, in its increased respect for humanity and in its law-abiding character, is an object for philosophic admiration. It would be idle to deny the immense importance of some of the changes which have taken place in history, but this claim is unduly magniloquent. Cruelty, for example, stalks in modern commercial life as darkly as it was frank in mediæval. One must judge the new régime by its most perfected example, and that is the United States of America. Let us accordingly pass across the Atlantic for an inspection.

In the United States the system has had almost a clear field for its development, for that country has roughly shaken itself free of all the traditions and ancient trappings of the Old World. If, therefore, Europe is to pass definitely into the commercial age, the condition of the United States should be at this moment of the intensest interest to us on this side of the Atlantic. Free of all hampering restrictions, her cable weighed, her decks clear, and in full sail, the ship puts forth upon an unknown sea. What is there before her—and us? An amusing volume was issued some time ago, purporting to be the letters of a Chicago packer to his son. It would be equally possible for some satirist to depict the views and

morals of a London or a Manchester merchant, but it is certain that they would not be so frankly commercial, just as a similar picture drawn from epochs before the dawn of the present age would have been still less commercial in its aspect. London to-day stands between Chicago and the past. The question of interest is whether London will ever reach the condition of Chicago. The ideal of Chicago, as represented in the letters I have spoken of, is naively, openly, almost brutally practical. Education is only valued if it helps a man to make more money. Everything is set forth in terms of dollars and cents, and even the choice of a wife is viewed from that point. The wife will "help along" the household, and keep things all right so that the husband can make more money. The Chicago ideal, which, with variations, and, of course, exceptions, is the American national ideal, recognizes one force and one force only in the world, or rather makes other forces inferior to money, and mere denominators of that great, supreme, and ultimate force. Not culture, not art, not beauty, not wisdom, not humanity, not death itself is the final consideration in those days which see beyond all such trifles the omnipotent symbol of power evolved by the genius of modernity. A dollar represents so much—so much authority over all these other things. The silver of a dollar will purchase this much of culture, that much of wisdom, this much also of health. There is some reason in the worship of a thing which is so authoritative. Men have worshipped it down these long centuries, but never has the cult become a national, a state religion before. It is a matter of debate how far climatic influences have affected the original stock from which the American derives, and made a breach with the Anglo-Saxon blood and character on this side. Obviously

the difference has appeared, and is growing wider. The reason may be climatic, or it may be partly the result of newer social, economic, and industrial conditions. It is, however, impossible to distinguish between what in the tangible issues comes of racial changes, and what of economic conditions. American civilization is presented to us to-day as the type of the new order to which effete Europe must approximate or perish, and as such has to be considered gravely.

The pursuit of new ideals, then, under the economic and climatic conditions existing, has revolutionized the outlook of the American man. He has abolished leisure and pleasure save for his womankind, a point on which I shall touch presently. The natural animal owned and enjoyed a great deal of time apart from the avocations to which necessity called it. So, too, natural men did and does the same. Americans who come to London, and still more to Paris or any Continental centre, laugh at the easy hours and comparative indifference devoted to business. Their idea is "hustle" and haste. That there may be other objects than to make money they recognize as a fact, but as an incomprehensible fact which is to be found only in the decadent countries of Europe. This restless temperament offers to its specific gods the most devout worship. Its devotion, indeed, is fanatical, and can, like all fanaticism, so twist the natural sweetness of man as to make him inhuman. Hundreds of people perish in these islands every year, in order that the American magnates of a monopoly in oil may add to their millions. I will repeat that this in a lesser degree is true of Great Britain; I am dealing with America because it is there true in a greater degree. The same spirit is witnessed in the operations of the Chicago wheat pit. A Mr. Leiter some years ago attempted to cor-

ner wheat with the object of making so many million dollars. The result of this deal, if successful, would have been to raise the price of bread in Europe and incidentally increase the margin of starvation. Latterly some brokers in the United States have "cornered" cotton, with the result, we are informed, that many small firms are ruined. Instances could be multiplied if there were any object in mere multiplication and repetition. My point is frankly this—that the Age of Trade, as it exists in America, is as callous, as selfish, and as reckless of human life and human suffering as was the Age of the Sword which we are leaving behind. In some respects, indeed, it is more callous and more selfish; for those engaged in the ruin and destruction of their fellow-creatures did not in former days take classes in Sunday schools, and make great and ostentatious business of charity. I will ask any person without prejudices to consider if these strictures are not justified. Modern civilization has brought better sanitary conditions, it has brought fuller medical and surgical knowledge, and it has also brought a revulsion against war, as something which is not only barbarous, but interferes with the comfort of some and the business of others. But these benefits are more than outbalanced by the deterioration of other conditions. The country is denuded of its population, towns swarm with human creatures as if with vermin; and whereas once kings sacrificed the pawns in their selfish interests by the ordeal of battle, now it is the commercial tyrants who condemn to ill-health, starvation, and death.

I have already alluded to the effect of this new competition of trade upon the human body. This requires some further remarks. The experience of individual men, particularly in America, is undoubtedly that the wear and

strain of modern commercial conditions is deleterious to health. In point of fact, the Americans have more widely departed than any other nation from the conditions suitable to the normal healthy man. A well-known American man of letters, Mr. Merwyn, has recently pointed out that "the English, though the older people, are much the more primitive, closer to the vigorous savage from whom, after all, the dynamic force of a race is derived." And this frailer nervous development of the American, this retrogression from the savage (if I may put it in that way) is notable in both sexes. The character of the American woman to-day is, like that of the man, a product partly of racial modification and partly of the social conditions of the commercial age. Observation, as well as humorous satire has made us in England very familiar with one who is claimed as the crown of creation, as the very ripest and most delicious fruit on the tree of Life. We have many opportunities of studying the American woman, for she has undertaken to annex as much of Europe as is practicable, and has succeeded very fairly. Moreover, she is revealed to us every day by the literature of the United States, as well as by the confessions—perhaps I should say the vaunts—of the vernacular press. In any case, it is impossible for Europe to remain ignorant of her qualities, as impossible as to remain ignorant of her existence. A little time back some enthusiastic journal in New York was at the pains to compile a list of American women who had married not Europeans merely but Europeans with titles. I have forgotten the precise number, but I remember it was a very extensive list. The large majority of these ladies were confessedly wealthy, and it would be absurd to ignore the obvious bargain upon which many such matches are based—on the one side money, on the other influence

or position. It is considered by the taste of the day quite a creditable thing that some pork-packer's dollars from Chicago should buy a coronet in Mayfair. I have only to read the daily papers of my own city to discover how largely American women, whether married to Englishmen, or imported otherwise, bulk in the social world. It is not to be doubted that there is a vast number of Englishwomen who attend what we know as "social functions" and whose names do not get into the papers; and consequently one can only surmise that it is by some additional notoriety that the fair Americans become conspicuous. In the height of the London season this year a great charity ball was given at which it is calculated that over 4,000 people were present. In an account of this in one of the papers that cater for those who hanker after knowledge of smart society, there were thirteen names mentioned, of which ten were American.

The American woman is claimed by her admirers as being independent. But she is more than that; she is anarchical. The State has been built upon certain sociological facts as foundation; the American woman is destroying these, and with them therefore the structure of the State as it exists now. Another system may conceivably be erected on other foundations, and this may be demonstrated to be superior, but the influence of the American woman is revolutionary as far as the present order goes. An American lady, Mrs. George Cornwallis West, who is held in great repute, informs us that American women love titles because they are "striving always to have the best of everything, including society." We are also told by this undoubted authority that the American girl "seldom loses her heart, and never her head." In that confession I see the main source of the anarchy which she effects, and the degeneration which

she represents. One more quotation from Mrs. George Cornwallis West may be useful:

The American woman has often been taxed with being extravagant, and, if this be true, her bringing up must be held mostly responsible. The hard-working busy man of Wall Street, steeped all day in the making of dollars, wants when he comes home to find his women folk beautifully dressed and their surroundings in keeping; for them he slaves—that is the object of his life and work. They dip into the coffers and ask no questions.

I have written above the word "degeneration," because from one particular point of view, the state of things created by the American system, as even set forth by Mrs. George West, spells degeneration. The most exact obedience to nature means the greatest health and the greatest happiness. The evidences that American women are deliberately turning their backs on natural laws have accumulated of recent years. Their cold-bloodedness is, in effect, a signal of degeneracy, testifying to the desiccation of natural sentiment. And that this exists in all classes, and not alone in the moneyed classes, is apparent from a perusal of the instructive book, *The Woman who Toils*, by Mrs. Van Vorst and Miss Van Vorst, to which President Roosevelt recently contributed a prefatory note. The attitude of the factory girl is represented as something like this: "I ain't ready to marry him yet. Twenty-five is time enough. I'm only twenty-three. I can have a good time just as I am." That is precisely where the mischief lies, in the good time! "What part," asks Mrs. Van Vorst, "did the love of humanity play in this young egoist's heart? She was living, as she had so well explained it, 'not to save, but to give herself pleasure.'" The mere ethical questions involved here do not concern my investigation. It is something

deeper and more fundamental than mere ethics that is involved. Mrs. Van Vorst discovers her factory girls to be cold and lacking in sentiment, just as Mrs. George West discovers her wealthy young compatriots to be. Mrs. Van Vorst declares that she never heard of a baby in Perry, the factory town in which she worked. She says "the American woman is restless, dissatisfied. Society, whether among the highest or lowest classes, has drawn her towards a destiny that is not moral. The factories are full of old maids; the colleges are full of old maids; the ball-rooms in the worldly centres are full of old maids. For natural obligations are substituted the fictitious duties of clubs, meetings, committees, organizations, professions, a thousand unwomanly occupations."

This inevitably opens up a grave problem, on which Mr. Roosevelt has not hesitated to speak his mind. Mrs. Van Vorst says: "Among the American-born women of this country the sterility is greater, the fecundity less, than those of any other nation in the world, unless it be France." She considers, however, that the causes of this increasing sterility are "moral and not physical." Mr. Roosevelt agrees with her in this, that "there is no physical trouble among us Americans. The trouble with the situation you set forth is one of character." The statement that it is mainly moral is probably correct, although those climatic conditions as well as the increasing departure from the healthy savage, noted by Mr. Merwyn, might suggest a physical explanation in part. But the real point is that, if it be merely moral, it is no less an unhealthy sign, and amounts, as President Roosevelt states, to "decadence and corruption." In a recent number of the *North American Review*, Mrs. Bisland, who has devoted her life to the special study of questions relating to her sex, endorses and reinforces

the arguments of Mrs. Van Vorst. According to her, "this failure in natural and wholesome increase among our white natives is due to nothing more or less than the over-education and abnormal public activities so ardently encouraged among our women since the close of the Civil War." Again: "The most marked and deleterious effect of Americanization upon woman is the false energies and abnormal ambitions it excites in her life. Her endeavor is no longer toward the realization and glorification of her sex in its femininity. The education she receives tends to render her either contemptuous of or indifferent to her own peculiar forces, and their normal expression."

It would seem that while the American man unnaturally devotes all his days to money-making, the American woman as unnaturally devotes her days to pleasure. Even in the lowest class, the factory girls, according to Mrs. Van Vorst, work, not in order to keep themselves or help the family, but to bedeck and bedrape their bodies. History knows of no such strange *bouleversement* as this development in the relation of the sexes. The women of the Germani, who were not, of course, merely the Germans, are described by Tacitus as chaste and fair, and as resembling the mothers of ancient Rome. *Ibi corrumpere nec corrumpi sæculum vocatur*. In that sense one does not look for corruption among American women either; but is that only because of the coldness of which Mrs. George West speaks? That the human spirit should vibrate with passionate human feeling and fall, is to me, I confess, more estimable than that it should starve of coldness in virtuous orthodoxy. But the ideal of the Germani is gone, and gone also is the ideal of the feudal times. We are face to face with a newer type. Whereas the savage woman acted as beast of bur-

den to her lord, the American man works like the beast of burden beside his triumphing lady.

I have written that the conquering cause must always please the gods; to that I will add *sed victa Catoni*. I lay no claim to be considered a Cato, if only because he was of a conservative type which was perpetually at war with change and progress. It is only departures from the norm that divide or trouble a progressive mind. The new era, as represented in the United States, certainly affects me personally with distaste and misgivings. If this is to be the development of Europe also, it would almost seem as if the late Mr. Charles Pearson was right in prophesying the ultimate predominance of the yellow man. But it is permissible to ask if the final victory is, after all, so certain. The cause is not decided yet, and there are certain considerations which suggest the advisability of suspending judgment. The facts which I have touched upon in these pages seem symptomatic of a life not wholly in harmony with the designs of nature. Overworked men and nervous women tending to sterility, and living upon an artificial plane, do not promise a brave future for a nation. At present immigration is keeping up the life of America, but American writers complain that the immigrants are infected with the American faults and characteristics very soon. That great cauldron reduces all things to a consistency. When we read with astonishment of the strange mental developments across the Atlantic we must attribute them to the new conditions which we on this side have not yet reached. Americans are the victims of quack medicines and quack religions, and quack theories. No country since the beginning of time was so abject before false pretensions and false prophets. And here they touch that ancient savagery with which they

have no other connection. Mr. Merwyn, the keen observer whom I have already quoted, says that "the problem of civilization is to train and cultivate the noisy sensual savage existing in every man, without refining away their instincts of pride, of pugnacity, of pity, which make men strong and effective." He adds that "perhaps the English, of all races in the world, have come the nearest to doing this." This reminds one that Emerson concluded that "England is the best of actual nations." It is not possible, as I started out with saying, to determine the ultimate goal of civilization, and it is absurd to suppose that all progress is in a straight line. The eventual triumph of the yellow man may be the design now in process of working out. Races have been extinguished before now, and kingdoms and empires have passed away in plenty. So that it would be rash to assume that the American civilization was destined to be the civ-

The Nineteenth Century and After

lization of the future. I have given my reasons for coming to a different conclusion. History is full of interim civilizations, which are, one may conclude, rough experiments on the part of Nature. Is America a rough experiment? If so we may be assured that she will be discarded, and that she will not be allowed to interfere with our ultimate destination. The defects of American civilization, which is the purest and most significant exponent of commercialism, are such as derogate from the virility of man and the fecundity of woman. Unless it materially alters it would seem, therefore, to be doomed, doomed despite all its intelligence, its immense natural gifts, and its subtle insight, doomed as was that Martian civilization of Mr. Wells, which with all its gifts, and knowledge and power, perished on Primrose Hill, before the natural forces of a world which it had despised and would have conquered.

H. B. Marriott Watson.

TATA.*

TRANSLATED FROM THE FRENCH OF JEAN AICAED.

XII. MONSIEUR PIERRE BOUNAUD OF PARIS.

Mme. Bounaud had been forced to take to her bed. "My legs," said she, "won't carry me."

She obstinately refused to see a doctor. "How could he understand what is the matter with me? I should have to tell him everything. No!"

But she added eagerly, "Go, get the apothecary to give you something," and she winked imperceptibly. Adèle understood. She lost no time in going out and hurrying to the *Croix de Malte* to enquire whether M. Pierre Bounaud

had come back. This action on her part was in more ways than one a marked event. Adèle went out alone for the first time in her life, and on an errand which must be concealed from her father, and with her mother's connivance. The gentle soul, timid though she was, felt no embarrassment at finding herself in the hotel lobby, among a crowd of elbowing travellers on the point of starting for Draguignan. She was conscious only of her mission. She applied to a servant:—
"M. Pierre Bounaud! Is he here, please?"

"M. Bounaud—from Paris?"

"Yes!"

* Translated for The Living Age.

"Why, it's Mlle. Adèle Bounaud" exclaimed the proprietor, catching sight of her. "M. Bounaud is in his room. Number three; up one flight: the first door to your left."

In a second she was knocking at the door of Number three.

"Come in!" responded the self-satisfied voice of Pierre.

"So it's you, my good Adèle! I'm very glad to see you, but knowing your habits I didn't expect you till to-morrow morning at market time. It can't be all a bed of roses, life with the old man! What a character, my dear! I really can't get over it! Roars and yells and blows of the fist upon the furniture. Oh, no! as he put it himself, that sort of thing is not well-bred. You see, little sister, I'm used to being my own master now-a-days, and I am, above all, accustomed to a different type of manner. I go into very good society. Men of genius are received everywhere in Paris; their acquaintance is cultivated and thought to be a privilege. No one judges their little peccadilloes harshly if only they are well dressed and keep their hair cut. Have a seat!"

He was making repeated trips, as he talked, to an open valise. He had spread out upon the white cloth of a table all the paraphernalia of his toilet, a mass of brushes and combs and a long array of bottles.

Through poor Adèle's mind the idea did pass that M. Pierre Bounaud of Paris had indeed sinned against their good parents, and that he showed too little feeling at the present time. But at once she chid herself for this involuntary criticism, as if it had been a fault, an evil thought. No one, not even their father, was capable, at this moment of judging the requirements of Pierre's position. Was he not one of those beings predestined to artistic renown?

Talked and have we the right to apply

ordinary standards to such men? The same exaltation of spirit seized her, as she thought of her brother, which young girls are wont to feel when they are in love. He was to her the most intelligent, the most remarkable of men. His faults were doubtless the inevitable consequences of his genius. She was not competent to judge him.

"What am I?" she said to herself, "in comparison with him. An ignorant midget! A mere nothing!" She would not blame him, yet her soul remained independent, notwithstanding her intellectual submission, and unconsciously to herself the first words which she addressed to her brother contained a shade of reproach.

"You have not inquired for mamma. But I bring you news of her. She is feeling very ill. That terrible scene was too much for her. She wouldn't say anything to me before papa, and he hasn't left us an instant alone, but I can read her thoughts. We always think alike. She made a sign to me with her eye and it said, 'Go and see him: see if he needs anything, and tell him that we shall come to-morrow and give him a morning greeting, and that he is not to distress himself too much. I will try to get his father to forgive him. Tell him to wait a little. Poor dear boy! He must be feeling wounded and humiliated. Tell him that from a father nothing counts but his caresses. There is no such thing possible as an insult from a father to a son. We adore him, our man of genius. Tell him this, and tell him to expect us to-morrow morning at market-time.'"

"All this," replied Pierre, "is very fine; but if you had not told our father what you promised me you would keep from him, that famous scene would never have taken place. I don't want, for my part, to reproach you unnecessarily, but to why did you let him worm

the secret out of you? Women can't hold their tongues!"

Adèle was at the first moment so amazed by his accusation as to be unable to answer it. Presently, however, she explained to Pierre that it had been he who had betrayed himself.

"Then it was simply a cursed fatality!" he exclaimed, without the faintest apology for having suspected his sister of indiscretion. "Well, let's say no more about it! I should start back this very evening if I hadn't ordered my chaise for to-morrow. You can understand, little sister, that I have had enough of it. Yes, quite my fill! See here! I brought you a little present, a copy of the *Imitation*, and a charming piece of book-making it is!"

"How good you are! And for mamma?"

"A prayer-book. Here it is!"

"And for papa?"

"A cane. But that I propose to keep for myself. It would seem a little ironical if I were to give it to him now. And besides, I should really be afraid that he would break it across my back."

Nothing was said about the real occasion of Bonnaud's wrath,—that is to say, about Adèle's marriage. It did not once occur to Pierre.

"By the way," said he, "here are some copies which I have had made for you of different bits of my opera,—all the airs, each one by itself. Learn them and sing them to our friends. In that way you can help to make them known. Some day I may want to open a public subscription at Toulon and so I've got to make the people here see what I can do as a composer. Bear in mind, little sister, that I am determined to become a great man. I shall do my part, of course; but, in our day, genius is no longer all-sufficient, a man must have 'pull' and tact and the support of women of the world. You can easily understand that when it

comes to judging of life as it is, I am better situated at Paris than my father here at Toulon. Down here you don't see anything at all. In the provinces one is positively buried alive. When I do anything which you don't understand, you should say to yourselves, 'He knows what he is about, for he is on the field of battle and can see the lay of the land.' I don't know anything more ridiculous than those literary strategists who rearrange the battle of Waterloo after Napoleon and after his defeat. Good Lord! Don't you suppose I know my business?"

"Oh, I am sure you do!" said Adèle in naive bewilderment. "So it's agreed then? We will come to-morrow morning about eight; mamma is dying to see you!"

"Let's call it nine," said Pierre, who attached very little importance to the gentle impatience of his mother. Adèle gave a start of surprise. "During the night I meditate and compose," Pierre continued, correcting his mistake; "and in the morning I have to take a little rest."

The absolute unscrupulousness of your true egotist is almost sublime. In great conquerors and famous poets it can be inexcusable—it is always excused. Adèle behaved like conquered nations or enthusiastic audiences. Her brother assumed to her the proportions of a demi-god. He trampled on the poor girl's heart as if it had been his footstool. And she smiled, with the smile of one of Raphael's virgins.

Thérèse swallowed the sleeping-draught which Adèle brought back to her. "He is all right," the noble girl whispered in her mother's ear, "strong and courageous and more determined than ever to work and win his way."

"There's no need of your whispering, my good souls," declared Bonnaud. "I know perfectly well that Adèle has just been to see Pierre, and that the

best remedy for his mother is to feel sure that nothing is the matter with him. That will quiet her nerves better than any potion. And don't be alarmed about him: nothing affects such a nature as his. Egotism is a great preservative. I'm not going to prevent your going to see him before he goes back."

Thérèse was already smiling. "Come here, Bounaud!" said she.

He drew near the bed. Adèle brought him a chair.

"Listen!" said Thérèse. "I'm very tired, Bounaud, and for a long time now I've felt that my strength was giving out. To-day I experienced too many emotions at once, far, far too many. Your violence toward our son did me a great deal of harm. And then the horrible news"—she lowered her voice—"the mortgage. Believe me, Bounaud, I shan't very long survive all this that has happened to-day. Don't cry, Adèle. I don't wish to torment you by fanciful terrors and vain words. If I speak it is because I am sure of what I foresee. Something tells me that I shall never see the sale of the house. And indeed I hope that it may be so. I would rather die before it comes to that. Adèle is a good housekeeper and a devoted daughter. You'll hardly notice my absence, for I don't make much noise—I don't speak often. Well, Bounaud, I've one thing to ask of you, I make you one dying prayer—The wishes of the dying are sacred . . . Bounaud, let Pierre come back to me a little while—just long enough to see me die!"

She was sitting up now in her bed, with her hands clasped; and she gazed at him as a suppliant believer gazes at her divinity. He had a tender impulse to yield. She perceived it and continued entreating him in her feeble voice:—

"You are like God, at this moment, Bounaud, like the good God, who by

a sign, can bring despair or joy to the hearts of his creatures."

"Father," implored Adèle in her turn, "Pierre isn't wicked; he is only thoughtless, and perhaps even that is too severe a reproach. For perhaps he knows better than we do what steps have to be taken in Paris, to ensure the result which you desire, which we all desire as much as he. That is what he told me himself just now."

"Did he say anything to you about Marius, or your marriage, which has been postponed and perhaps prevented by his fault?"

"No, father, we did not mention that," she replied naively.

"Well," resumed Bounaud, rising, "my duty is to protect you against him, in spite of yourselves; for he would eat your hearts out after having stolen the bread from your mouths! And so, he shall never set foot here again, while I live. If he comes in, I go out. Him or me, take your choice!" And with these words he left them.

"Perhaps your father is right," said Thérèse, gently, in a very faint voice, as though her strength were quite exhausted. "Pierre sees only his ambition. He would take from us the little we have left! Then your marriage, which has already become uncertain, would be made quite impossible. Men are stronger than we. We will have a cry together, my love. That's one consolation of which they can't deprive us. But, since your father is willing,—help me to get up, Adèle . . . We'll go and see Pierre . . . I'm quite strong enough . . . It was only an attack of giddiness . . . I shall have the strength to go and see him. . . . Come, dear."

"M. Pierre Bounaud? Go see if number three is in. He is gone out, ladies."

"We will come back to-morrow morning at eight."

"No, he said nine, mamma!"

"Well, at nine, then."

"Not later than nine, ladies. M. Bounaud has ordered his horses for half-past nine, sharp."

And meanwhile he was dining at Balaquier, at a certain tavern which he remembered where one gets excellent *bouillabaisse*; dining in the company of some naval officers, and certain young women, of whom some had escorts and others had not.

The two grief-stricken women left at the hotel a bundle which they had brought. It contained goodies—quince marmalade and other preserves—and cravats and stockings of their own knitting. Pierre to rid himself of the encumbrance, distributed these things among the hotel servants.

XIII. "FORCED SALE—."

The Bounauds resumed their monotonous life, a life harassed now by a perpetual dread of their creditors.

Marius had gone to America. The day after he started, Bounaud had said to his daughter, "I saw Marius yesterday. You've plenty of courage, Adèle, will you promise me to show it?"

"I have sworn to myself to have all the courage which life requires, and I will keep my oath," she replied. "What fresh blow has fallen?"

"Marius did not think it best to see you again before leaving. That's the sort of fellow he is. He is afraid of sentiment. I believe him to be the kind of man who will face realities, no matter how painful; but, if I know him, he dreads discussion, explanation, emotion. And, really, I don't know that he isn't right!"

"Perhaps so, father!"

"For my part, what with my words and theirs I have always got into a mess when I tried to talk to other people. You wind yourself up, and get excited, and finally you begin to hesi-

tate and don't really know what you ought to do. And half-way measures are never any good. It is not merely in love that the only true victory lies in flight. You must fly from anything that has become a passion with you, unless you want to be conquered by it. A gambler who wants to give up gambling ought never to touch a card again, even to throw it into the fire. That was why I did not want to see your brother. The fellow would very likely have fooled us all again. So I cut my bridge; I clasped my left hand with my right, and swore never to see him again. Do you understand? And I don't want to hear his name mentioned. It is a command which I am laying upon you, and which I want you to pass on to your mother. To return to Marius. Come here and let me give you a kiss, my brave child. He was afraid, of himself and of you, of the interview and your tears. He was afraid that he would not have the strength to go if he saw you again."

Adèle was very pale. Her father pressed her to his heart, then seated her on one of his knees.

"And so he is gone . . . When?" she asked.

"Yesterday."

"He did quite right, since you say so, papa."

"I am the gainer by it, since you are left me," replied Bounaud. "And from this time forth I promise to be your faithful protector. You've still a little money, and I will keep it all for you. The devil himself shan't wheedle a cent of it out of me. You know the house is to be sold. The failure of *Belcolor* has certainly left its mark. My creditors want their money. It is perfectly just. It's to be sold. Yes; sold."

Thérèse entered with short, unsteady steps. She had grown thin, and all her limbs trembled a little. She saw Adèle upon her father's knees and

thought within herself: "The worse things go the more my poor husband turns for comfort to his daughter; he leans on her now quite openly. In old days when anything serious happened he used to lean on me without seeming to do so; but I am no longer good for anything. I've been worn out in his service and I am dying. How fortunate that he has his daughter. She will look after them both."

Adèle started to leave the room.

"No, no!" said Bounaud. "You are not in the way, child. You have a right to take part in our family council. The boat is sinking and I want your advice. We've got to make up our minds. No useless tears, don't you say so, Thérèse?"

"Don't be alarmed, Bounaud. My tears are all shed. I have none left."

"Nonsense, women always have them! Listen!" Then he proceeded to explain. When all was sold, they would only have left them—save the remainder of the dowry which he did not wish to touch—something like three thousand francs, their furniture and linen, what was left of their silver, and, finally, what they called after the fashion of the country, the *cabanon*.

The *cabanon* was beyond the city limits in the Faubourg St. Roch. There was a garden as big as the Haymarket, and the little house had on the lower floor two rooms and a tiny kitchen, and on the second story there were two big bedrooms. The whole place, garden and house, had cost Bounaud less than five thousand francs. There they were to live. Bounaud would go back to his violin and his flute, and give lessons at his house and in town. He would have plenty of pupils. He had already made enquiries. Oh, yes, he had been promised a great many pupils.

Adèle interrupted him. "But what am I to do, father, for the general good?"

"You are to see to the house. Your mother is to take things easily. She needs a rest; and you will find plenty to do, never fear."

"It is very hard," murmured Thérèse, "to feel that one is useless. . . ."

"May I say something, father?"

"Didn't I say I wanted your advice?"

"Well, then, this is my scheme. Let us build out from the east side of our little country-house a great room. It won't cost very much, because the wall of the house, which has no windows on that side, will make one of the sides of the new room. Set up a post on a line with the two east corners of the building, connect them by a cheap brick wall, pierced by some nice large windows, and there you have a room as big as the whole *cabanon*."

Bounaud looked at her without in the least understanding. He thought she had gone out of her mind. "But why?" said he. "I tell you we are ruined. It's no time to build." And to himself he said in all seriousness, "Can our misfortunes have made her mad? That would be the last straw."

"Some wooden benches," pursued Adèle, "a big table at one end, a crucifix upon the wall, and there you'll have a nice day-nursery and school-room for children from two to five. I will be the mistress. Your lessons will leave you some free time; and every day you will come and play a little to the babies. Once or twice a week in the evening we will give instruction in vocal and instrumental music in the school-room to older people at cheap rates, so that even the poor can afford to come. In that way you can train musicians for the naval and military bands. On other days you can have a rather better social class at higher prices. There's nothing fanciful about all this, papa. I've thought it all out carefully. Trust me, and build me my school. You'll find that it is a good investment of your money. You can

see yourself that it would be so. I've already been round canvassing. I shall have plenty of little scholars, plenty. The priest at the church of St. Louis will help me. He tells me that everybody will want to do something to help us. Have I convinced you? I am so glad! We shall have a busy life, more useful and so happier than ever before!"

Bounaud was radiant. "Really, women have some sense!" he cried. "We are saved!"

The project once adopted, his imagination took a fine flight. "The garden shall be the playground!" said he. "I will help you watch over your little flock. I'll teach them to march to the violin. It will be charming. We will put the *St. Cecilia* in the parlor; she shall protect our home."

The artist in him woke to life again after its long sleep. At the very moment when his former social status was perishing forever, he was pleased as a child by the thought of his new existence. "The most delightful of all books is Robinson Crusoe, the story of a shipwrecked man upon a desert island, who makes for himself a new life, the life of a civilized man, out of the scanty fragments of his ship. We will gather a whole world about us,—children and families. It is splendid! Ruin has its good side. I'm clever with my hands. I've always had a little forge of my own, a carpenter's bench, tools of all sorts. I will make everything myself—benches and tables; the benches shall have backs, each child's place separated from that of the child next it by a little arm which can be fastened down or up by means of a little bar. I've always been a musician, at the bottom of my soul, musician and artisan, that's what I was meant to be, I was indeed!"

He rubbed his hands, discounting the misfortune of the forced sale. In imagination the sale already lay behind

him. He was afloat upon the future.

"At the beginning I shall get three and five francs for my lessons. Before long I shall be making twenty to thirty francs a day. And then the class work! . . . And your fees . . . With economy, Thérèse, we'll make up the dowry again. Yes, we will. Let me tell you this: women are angels, and people ought always to do exactly what they say!"

His two auditors seized his hands and kissed them humbly.

"Certainly," murmured Thérèse, "all your plans are very nice . . . they'll all succeed, I'm sure. I've perfect confidence in your courage, your strength and your energy: but a misfortune is a misfortune all the same."

And in her feeble voice she asked the question which was never out of her mind, "Is the day of the auction announced?"

Since the day when, in the presence of his son, he had confessed to his wife that they would soon be forced to leave their house, Bounaud had hardly alluded to the matter to her.

Up to that day he had exhausted himself in devising means of concealing from Thérèse first, the amount of his indebtedness, and then the mortgage on the house. It had been an easier matter than the reader might imagine. Any lawyer in fair Provence can tell you that in that easy-going land, many business matters, even very important ones, are managed with a careless good nature quite unknown in more northerly regions. Of course at the end of the path, sooner or later, the wayfarer comes up against the letter of the law, which must be obeyed. But till that moment arrives, there is, as a general rule, a great deal of temporizing. Much weight is given to sentiment; and local custom often sanctions the sharp bending of laws which it would never break and which

seem at first sight to be absolutely rigid. And how much more was this the case about 1848, the epoch of humanitarian Utopias!

Bounaud had begun by borrowing large sums of his friends, who, knowing him as they did, demanded of him no further security than his personal note. They respected the avowed wish of their creditor to conceal the amount of his indebtedness from his wife so as to spare her pain. Besides they were perfectly certain that, when the time came, she would relinquish all her rights, rather than raise even the faintest objection. Then, too, the legal claim of the wife only extended to a few thousand francs—for her dowry had not been large—and consequently made no material difference in the amount of their security as compared with that of their loans. As for moral security, there was no danger at all on that head. To Master Bounaud they would have lent money with only the security of his word! For months, their real guarantee was his verbal promise to sell his house should this become necessary, in order to repay them. And with matters in this state they remained for a long time in perfect security. It was only much later that they quite naturally became anxious, and asked Bounaud to have a mortgage formally drawn up. This was done by his lawyer, without a word to Thérèse. Her legal claim would remain unprejudiced in any case, and with this reflection Bounaud stifled the pricking of his conscience. Besides, the dear, good woman knew very little about legal formalities. In the same way that, not knowing how to read, she had received one day from her husband's hands the fifty thousand francs of the dowry, and never even dreamed of counting them in the presence of a witness, in the same way, without counting them, she abandoned all her personal rights. Even had it

been translated into simple French, she would have found it very hard to understand the admirable formula:—

"Tota in toto et tota in qualibet parte."

Thérèse, dear soul, felt nothing but the sentimental pain of losing a house which belonged to her husband, it is true, but which she thought of as her own, because her father and mother had rented it of Etienne the smith, had lived in it for many years, and had died there.

And so it was in a tone of poignant distress that Thérèse pronounced the simple phrase:—"Is the day of the auction announced, Bounaud?"

In the body of this rough man with the powerful biceps, capable of strong resolves, of keen suffering and violent anger, there dwelt the soul of a child, easily made happy, easily induced to forget. This man whose emotions were so vehement, whose obstinacy was so extreme, was yet, superficially, a man of quickly changing moods.

With a delighted air, as though he had already resumed his flute and violin and been paid a hundred francs for his first lesson, this ruined man drew from his pocket an advertisement sheet, folded quite small, and began gaily to spread it out:—

"Pelloquin will run it up to a hundred thousand," said he. "He will certainly be the purchaser; and it will come back to you some day, Adèle, through Marius."

The word *house* was of course understood.

He pinned the sheet to the wall just under his father's portrait, and read out for Thérèse's benefit,

"Office of Maître Ortigues, Rue de l'Asperge, L. Toulon.

TO BE SOLD

at Public Auction to the Highest Bidder, A House—"

But at this word he stopped, and was answered by a little stifled cry.

Thérèse, who could not read, sat

Les Annales.

there motionless, her eyes wide open, and fixed upon the printed sheet. She was dead.

(*To be continued.*)

A LITERARY HIGHWAY.

Of all the great highways in the kingdom, the road which runs from London into Dover, and is commonly called the Dover Road, is perhaps the most historic. But other great highways have their place in history also, and so the Dover Road is but an historic road among a number, be its historic importance ever so great. It is the literary interest centred in its seventy odd miles that singles it out from all the other great roads of the country and causes it to stand alone as the great literary highway.

Let us view the Dover Road, our literary highway, as in a mirror, and see what it reflects. It reflects Chaucer and his "nyne and twenty in a compaignye" trudging its dust *en route* for Canterbury and à Becket's shrine; it reflects those wonderful tales, told one to another, to beguile the tedium of a lengthy journey, which Chaucer, the father of English poetry, has bequeathed to us.

It reflects the father of English drama, Christopher Marlowe, a young man of but thirty years of age, trudging from his birthplace, Canterbury, to the metropolis. It reflects "Dr. Faustus," his truly great work; it reflects a tavern brawl at Deptford, in which his young and brilliant career was suddenly brought to an end. At Deptford, too, "dismal Deptford" of to-day, it reflects the days of good Queen Bess: the luxuries of Sayes Court, and a vision

of Lord Lytton's "Kenilworth." It reflects Byron and "Don Juan" on Shooter's Hill. It reflects Shakespeare and "King Lear" on the cliffs at Dover. It reflects Shakespeare and Gad's Hill, by Rochester, with the valiant Sir John Falstaff plotting to rob the coach. The scene changes: it is Gad's Hill still, and our mirror reflects a pale sickly lad, gazing with admiration at a great house standing back from the highway; it reflects that same lad, now a man, in the full time of his glory, writing a literature that will never die: a literature that has fascinated, and will still fascinate, millions of readers wherever books are read; it reflects an empty chair in the study—and our vision of Charles Dickens vanishes, and with it the literature of the literary highway.

So let us now in all reality take a literary pilgrimage along the Dover Road. Let us picture ourselves *en route* for Rochester in the company of Mr. Pickwick, and his three friends, and the loquacious Alfred Jingle. Over London Bridge we rumble and down into the Borough. Where are the literary landmarks of this almost classic spot? Gone! Every one of them gone! Where is the Tabard of old, that hostelry of Chaucer's day?

In Southwerk, at the Tabard as I lay,
Redy to wenden on my pilgrimage
To Caunterbury, with ful devout cor-
age,

At night was come into that hostelry
Wel nyne and twenty in a compaigne,

That toward Caunterbury wolden ryde.

Where is the "White Hart" of Dickens's days, the immortal spot where Sam Weller made his bow to a vast appreciative public? Where is the house in Lant Street where Bob Sawyer gave his memorable party? Where is the Marshalsea, with its tender recollections of Little Dorrit? Gone! all gone, in the great endeavor to make London a more healthy and more habitable spot! St. George's Church is left, and with it we have a few lingering recollections of the night of Little Dorrit's party, when she went to sleep in the vestry with one of the parish registers for a pillow, and of a happy day, years afterwards, when she descended the altar steps, the wife of Arthur Clennam.

London is not left behind until we have gained the country beyond Blackheath. We might search in vain for Salem House, or the haystack beneath which David Copperfield slept on the first night of his memorable tramp to his aunt's cottage on the cliffs at Dover; but these are not the only literary landmarks of the district.

Shooter's Hill has a lingering memory of Dickens, of the night when the Dover mail lumbered up it, bearing in it no less a person than Mr. Jarvis Lorry. This was in the days of the highwayman, when, so we are informed in chapter two of "A Tale of Two Cities," "the Dover mail was in its usual genial position that the guard suspected the passengers, the passengers suspected one another and the guard, they all suspected everybody else, and the coachman was sure of nothing but his horses; as to which cattle he could, with a clear conscience, have taken his oath on the two Testaments that were not fit for the journey."

A fine picture of this literary highway in the days of the coach has Dickens drawn for us in that chapter, for none save him knew how to put life and vigor into its dust and stones.

And so, like the Dover mail, we "lumber up" the hill, listening the while to the loquacious stranger whose lively anecdotes soon find a place in Mr. Pickwick's notebook.

From Shooter's Hill Don Juan obtained his first glimpse of London:

A mighty mass of brick and smoke,
and shipping,
Dirty and dusky, but as wide as eye
Could reach, with here and there a sail
just skipping
In sight, then lost amid the forestry
Of masts; a wilderness of steeples
peeping
On tiptoe through their sea-coal canopy:
A huge, dim cupola, like a foolscap
crown
On a fool's head—and there is London
Town!

"This hill is dangerous." So runs the cyclist's notice at the top. Don Juan found it dangerous too—though in a different sense.

The poet Bloomfield, in his "Rural Tales," devotes one poem to this very hill, and mentions the curious Severndroog Castle, which is situated in the woods to the right, as

This far-seen monumental tower
Records the achievements of the
brave
And Angria's subjugated power,
Who plundered on the Eastern wave.

From this spot, until we reach Rochester, the road is chiefly associated with Dickens. Passing through Gravesend we soon reach the little village of Chalk, at the farther end of which we find a couple of pretty cottages standing at a corner where the road branches off to Shorne. Here Charles Dickens spent his honeymoon. When

he lived at Gad's Hill in later years he would often pass this spot during his daily walk—for he was a prodigious walker and the Dover road knew him well. Mr. E. L. Blanchard, himself of no mean literary fame, and at that time living at Rosherville, often walked in this direction, and in so doing often met with Dickens at the same spot. "This was," he informs us, "on the outskirts of the village of Chalk, where a picturesque lane branches off towards Shorne and Cobham. Here the brisk walk of Charles Dickens was always slackened, and he never failed to gaze meditatively for a few moments at the windows of a corner house on the southern side of the road, advantageously situated for commanding views of the river and the far-stretching landscape beyond. It was in that house he had lived immediately after his marriage."

Chalk Church is a few yards farther on, and stands out romantically against the distant river. This would often be included in his walk, says Dickens's biographer, John Forster. "He would . . . return by Chalk Church, and stop always to have greeting with a comical old monk who, for some incomprehensible reason, sits carved in stone, cross-legged, with a jovial pot, over the porch of that sacred edifice."

It is a most curious carving, and supposed to be symbolical of an ancient merrymaking known as "Church Ales."

This portion of the Dover Road between Gravesend and Rochester is a rare place for tramps, and Dickens thus describes it, in this respect, in one of his "Uncommercial Traveller" papers:

"I have my eye upon a piece of Kentish road, bordered on either side by a wood, and having on one hand, between the road dust and the trees, a skirting patch of grass. Wild flowers grow in abundance on this spot, and it lies high and airy, with a distant river

stealing steadily away to the ocean like a man's life. To gain the milestone here, which the moss, primroses, violets, bluebells, and wild roses would soon render illegible but for peering travellers pushing them aside with their sticks, you must come up a steep hill, come which way you may. So all the tramps, with carts or caravans—the Gipsy-tramp, the Show-tramp, the Cheap Jack—find it impossible to resist the temptations of the place, and all turn the horse loose when they come to it, and boil the pot. Bless the place, I love the ashes of the vagabond fires that have scorched the grass!"

Bless the place! Of course he did, for the steep hill which leads to "the magic ground" is none other than Gad's Hill, and on top is Gad's Hill Place.

Dickens came to live at Gad's Hill Place in 1856, at the age of forty-four, but from his very earliest days he had conceived a wonderful attraction for the house. This receives authentication at the hands of Dickens himself, who, in a paper entitled "Travelling Abroad," in passing down the Dover Road *en route* for Calais overtakes a vision of his former self. The story is a pretty one, and worth repeating here:

"So smooth was the old high-road, and so fresh were the horses, and so fast went I, that it was midway between Gravesend and Rochester, and the widening river was bearing the ships, white-sailed or black-smoked, out to sea, when I noticed by the wayside a very queer small boy.

"'Halloa!' said I to the very queer small boy, 'where do you live?'

"'At Chatham,' says he.

"'What do you do there?' says I.

"'I go to school,' says he.

"I took him up in a moment, and we went on. Presently the very queer small boy says, 'This is Gadshill we

are coming to, where Falstaff went out to rob those travellers and ran away.'

"You know something about Falstaff, eh?" said I.

"All about him," said the very queer small boy. 'I am old—I am nine—and I read all sorts of books. But *do* let us stop at the top of the hill, and look at the house there, if you please!'

"You admire that house?" said I.

"Bless you, sir," said the very queer small boy, 'when I was not more than half as old as nine it used to be a treat for me to be brought to look at it; and now I am nine I come by myself to look at it. And ever since I can recollect, my father, seeing me so fond of it, has often said to me, if you were to be very persevering and were to work hard, you might some day come to live in it. Though that's impossible!' said the very queer small boy, drawing a low breath, and now staring at the house out of the window with all his might.

"I was rather amazed to be told this by the very queer small boy, for that house happens to be my house, and I have reason to believe that what he said was true."

Was ever man so attracted by a house as Dickens was by Gad's Hill Place? Dickens loved his Kent, his Dover Road, and Rochester in particular. In almost all his novels this city of Rochester figures in one way or another; even before he came to Gad's Hill Place he had written the immortal "Pickwick" and described the city more or less minutely in sundry other works. His thoughts always turned to the towns on the literary highway, and after he had taken up his abode at Gad's Hill Place he gave us that charming picture of the district in "Great Expectations," and in his last work the fascination of Rochester held him still.

Our first impressions of Rochester

are thus admirably expressed by our friends on the coach:

"Magnificent ruin!" said Mr. Augustus Snodgrass, with all the poetic fervor that distinguished him, when they came in sight of the fine old castle.

"Ah! fine place," said the stranger, 'glorious pile, frowning walls, tottering arches, dark nooks, crumbling staircases; old cathedral too, earthy smell, pilgrims' feet worn away the old steps, little Saxon doors; . . . fine place, old legends too, strange stories.'

The "Bull Inn" is in the main thoroughfare, on the right-hand side. It is much the same as when the Pickwickians stayed there, and when Dickens himself slept there on various occasions. There is the ballroom still, with the little minstrels' gallery, and a recollection about it of Alfred Jingle masquerading in Mr. Winkle's dress-suit.

"Wright's, next house," which, according to Mr. Jingle, was "dear—very dear—half-a-crown in the bill if you look at the waiter—charge you more if you dine at a friend's than they would if you had dined in the coffee-room," is the "Crown," at the foot of the bridge, which, in Dickens's days was kept by one named Wright, and in its old form was the "Inn at Rochester," forming the scene with the flea-bitten travellers in Shakespeare's "Henry IV."

Our connection with Rochester does not take us from the High Street which forms a part of the Dover Road. Page upon page could be written of the literary interest of Rochester, but I must refrain from making more than brief mention of a few of the most important items.

Rochester Bridge, upon which Mr. Pickwick ruminated one morning until he was interrupted by the dismal man, is not the same bridge as that which now spans the Medway. The old bridge was swept away by a storm some nine or ten years after Mr. Pick-

wick's visit. Dickens gave many names to Rochester. In "Edwin Drood" it is "Cloisterham;" in "Great Expectations" we find it simply as "the market town." In one short story it is "Great Winglebury," in another sketch "Dullborough." The projecting clock at the Corn Exchange is a notable feature of the High Street, and is several times mentioned in the above-mentioned works.

"The silent High Street of Rochester," he writes in "The Seven Poor Travellers" "is full of gables, with old beams and timbers carved into strange faces. It is oddly garnished with a queer old clock that projects over the pavement out of a grave red-brick building, as if Time carried on business there and hung out his sign."

Opposite the clock is the "Bull Inn," already referred to, and a little farther up the street towards Chatham is a white house of three gables, known as Watt's Charity, or, in Dickens's parlance, "The house of the seven poor travellers," as this charity, which provides accommodation for "six poor travellers not being rogues or proctors," formed the basis of one of Dickens's well-known Christmas stories. On the same side of the road is Eastgate House, lately restored, which as the Nuns' House figured as the school of Miss Twinkleton in "Edwin Drood." Opposite is a large gabled house—Mr. Sapsea's house; whilst near at hand is the Gate House, opening into the Cathedral Close. At this house Jasper lodged with the verger Tope, as all readers of "Edwin Drood" know full well.

Of no town, save London, did Dickens write so much; no town did he love more. Before we leave Dickens and Rochester behind us let us quote the last description he penned of the cathedral city; it was almost the last paragraph he ever wrote:

"A brilliant morning shines on the

old city. Its antiquities and ruins are surpassingly beautiful, with the lusty ivy gleaming in the sun and the rich trees waving in the balmy air. Changes of glorious light from moving boughs, songs of birds, scents from gardens, woods, and fields—or rather from the one great garden of the whole cultivated island in its yielding time—penetrate into the cathedral, subdue its earthy odor, and preach the Resurrection and the Life."

We have left Mr. Pickwick and his friends at the "Bull;" the coach has gone on without us, and we needs must follow on foot in the wake of David Copperfield.

We pass through Chatham. It would indeed be hard to locate the spot where David pawned his "little weskit" to the man who, with his frightful "Goroo! Goroo!" bid him "go for fourpence," and so we walk straight through the town, up the long hill, to Sittingbourne and Canterbury.

There is not much left along the roadside to remind us of the days when countless pilgrims, weary and footsore, must have tramped this highway. For a greater part of the way the road is uninteresting, until we reach Ospringe and Faversham, and begin the ascent of Boughton Hill.

The village of Boughton-under-Blee must be familiar to readers of Chaucer's "Canterbury Tales," for it was here that the Canon and the Yeoman overtook the pilgrims in such mad haste:

When that tolde was the lif of seinte
Cecle
Er we had ridden fully five mile
At Boughton under Blee us gan atake
A man, that clothed was in clothes
blake,
And undernethe he wered a white sur-
plis.

Boughton Hill is a long hill, and by the time we reach the top we, like

many of the pilgrims of old, must take a rest, and enjoy the delightful views spread out on either hand. As yet Canterbury, though not many miles distant, is not visible; but as we descend to Harbledown—Bob-up-and-down Chaucer called it, and a very "little town" it is!

Wist ye not where standeth a little town
Which that ycleped is Bob-up-and-down
Under the Blee in Caunterbury way?

—we obtain a fine view of the pinnacles of the Cathedral away in the distance. It was here that the pilgrims first caught sight of the "Angel Steeple" (replaced in 1495 by the present central tower) and fell on their knees, their pilgrimage being all but at an end.

We enter the city of Canterbury, not so tired as young David, we hope, into its "sunny street . . . dozing as it were in the hot light; and with the sight of its old houses and gateways, and the stately gray cathedral, with the rooks sailing round the towers."

Mr. Wickfield lived somewhere in the High Street at "a very old house bulging out over the road—a house with long low lattice windows bulging out still farther, and beams with carved heads on the ends, bulging out too," but it would be idle to assign any special house as being the one occupied by Agnes's father.

The Chequers of Hope, where Chaucer's pilgrims stopped, was situated at the corner of Mercery Lane. Not much of the original building is left; indeed, the stone vaults beneath the present building are supposed to be all that remains of the "Chequers" of Chaucer's days.

The literary history of the Dover Road at Canterbury does not end with Chaucer and Dickens. The Rev. Richard Harris Barham, the author of the

immortal "Ingoldsby Legends" was born here in 1788, and his ancestral home was the village of Barham, from which the family took their name, only a few miles south of Canterbury, and near to "Toppington Everard," which figures so often in the legends.

Canterbury is to Barham what Rochester is to Dickens. Thus does Barham speak of his birthplace in "The Ghost:"

There stands a City—neither large nor small,—

Its air and situation sweet and pretty;

It matters very little—if at all—

Whether its denizens are dull or witty;

Whether the ladies there are short or tall,

Brunettes or blondes, only, there stands a city!

Perhaps 'tis also requisite to minute
That there's a Castle and a Cobbler in it.

A Fair Cathedral, too, the story goes,
And kings and heroes lie entombed within her:

There pious Saints in marble pomp repose,

Whose shrines are worn by knees of many a sinner;

There, too, full many an Aldermanic nose

Roll'd its loud diapason after dinner;
And there stood high the holy scone of Becket,

Till four assassins came from France to crack it.

The "dark entry" of the Cathedral has been made famous in the humorous legend of "Nell Cook," who "bought some nasty doctor's stuff and put it in a pie," and so poisoned the canon and his niece, of whom she was jealous.

Leaving Canterbury for Dover, sixteen miles distant, the literary interest lies off the Dover Road proper. In fact it lies on either side, and we may well call this portion of the road the Ingoldsby road. To the right is the

village of Barham, and the farmhouse known as Tappington, a picturesque little old house nestling in the valley, a house which hardly comes up to the expectations we had of it after reading the preface of the *Legends* and looking at the engraving of the house accompanying it.

To the left we have the road running to Margate—a road that savors of Smuggler Bill and Exciseman Gill ("The Smuggler's Leap"), of "The Brothers of Birchington," "Misadventures at Margate," and other well-known pieces.

But we have no time to search out Tappington Everard, to visit the Reculvers, to look down into the Chalk Pit,

The Gentleman's Magazine.

or to visit "merry Margate;" our road is David Copperfield's road, and with him we cross "the bare wide downs" and come at last to Dover.

Where Miss Betsy Trotwood lived is not to be stated with exactitude, but from Dickens's description given of the little cottage on the heights it is said to be one of the houses now known as "Athol Terrace," overlooking the bay.

Dickens gave a reading of his works at Dover, and afterwards said that "the audience with the greatest sense of humor is Dover," and Dickens was not the least humorous of the writers of this great literary highway which ends at Dover.

Walter Dexter.

THE JUSTICE OF THE MOUNTAINS.

All day I had been riding round the ruins of Ephesus, and in the afternoon the rain fell heavily, so that I was glad to hurry back along the Via Sacra with its empty tombs to the shelter of the inn at Ayasoluk.

There Mr. Karpouza, the landlord, had prepared a capital dinner, and I found a good fire blazing up the chimney in the dining-room. And soon, as the dark February afternoon closed in, in thick cold mist, the lamp was lighted, and I sat down to do full justice to the fare.

Driven into the inn by stress of weather came a tobacco trader, who, with a low bow, took a chair opposite to me and ate his soup in silence.

We began to talk about travelling other than by rail in such inclement weather. The trader was bound for Scala Nuova, which would have necessitated a long drive through almost impassable country. Then the conversation turned upon the latest news of

Tchakegie, the brigand. Mr. Karpouza had agreed with us in our self-congratulations on being so well housed; but at the mention of Tchakegie he made frantic signs from behind my back to the trader to change the subject. At length he could keep silence no longer.

"If you talk like this no more travelers will come this way."

"But," I said, "Tchakegie lives some distance from here."

"Only the name of his place is unfortunately the same as this. It is called Ayasoluk," said the trader.

Mr. Karpouza fairly groaned. "It means the place of St. John," he said apologetically, "but why the place of that ruffian should—"

"He's no ruffian!" exclaimed the trader.

"It is my misfortune," bewailed Mr. Karpouza, "that just the home of that brigand, of all people, should be of the same name as my own!"

"But no one would take you for a

brigand, Mr. Karpouza," I said, "unless, of course, you are as like Tchakegie as the name of your place."

"Oh Lord!" exclaimed the trader. "Like Tchakegie, oh Lord!"

"Did you ever know Tchakegie?" I asked.

"Yes, very well indeed, in former days. He is no ruffian, but a gentleman."

"Now, Mr. Karpouza, you hear that!" I said, "and you must let us talk about him with a view to his capture, you understand."

"Yes," cried the trader, "that's just it. Whoever catches him will get a lot of money by it."

"What would be the best way?" I asked.

"Well, you see," said the trader, pushing away his pudding plate and lighting a cigarette, "Tchakegie is not like any other brigand. He is a gentleman—the most perfect gentleman in all Asia. He will never harm a lady, nor a woman, nor a child. He will never harm a merchant either, though he may take from him a contribution—not too much, but something. He is good—oh, how good!—to the poor. But when it comes to cruel people and soldiers and their officers—ah! these are the ones he likes to catch; and the officials, yes—those too he will shoot. That is why the people have given him a name. He is 'The Justice of the Mountains,' for it is he that punishes."

"But he cannot make much of a living at that rate," I observed. "Don't you think he would be better off keeping an inn, for instance?"

"But, certainly, he is rich—very, very rich," answered the trader. "He knows who the people are who have been cruel, and have taken other people's money. Those are the ones he looks after, and he takes their money away and gives it to the poor and to those who have not enough, and some he keeps for himself. Ah! yes; he is

well called 'The Justice of the Mountains.'"

"But how would you propose to catch him?" I asked.

"Well, he is the most frank and generous-hearted man alive, and if I went to his place and said, 'Here, Tchakegie, I want your photograph,' he would say, 'My photograph! What for?' and I would say, 'Oh, just to sell to the newspapers and make a little money, for, you see, I am only a poor fellow.' Tchakegie would say, 'All right; you shall have it.' Well, when I had got that I could make a lot of money by that."

"Quite so; and the price upon his head—this frank, generous-hearted friend of yours—you would get that, too."

"Ah! that's it. You see, he would go anywhere to help a friend. That would be the way to catch him; but few people know what he looks like, and he is so different—so very different—from what people expect that they might talk to him for a long while without knowing who he is."

"He has never caught you?" I asked.

"Me! never. He would never hurt me. I knew him well years ago, before he turned brigand."

"What was he before he turned brigand?"

"Well, it was in this way. Many years ago now his father offended the officials—in the reign of the late Sultan that was—and in consequence he was obliged to take to the mountains and turn brigand. In these days perhaps he would have been exiled. A good many years passed, and the present Sultan came to the throne. Then an occasion offered, and he accepted the Sultan's pardon—that is, he surrendered and was given a billet somewhere in the army. A short time afterwards, an expedition started into the mountains and he was ordered to go too. He took with him his son Tcha-

kegie, who was then quite a boy. Tchakegie was riding in the rear, and as they rode up the mountain the road turned like a serpent, as you know it does sometimes, and Tchakegie saw an officer level his gun and take aim at his father, who was in front, and shoot him dead through the back.

"That made a great impression upon Tchakegie, and the impression had time to deepen, for the officer who shot his father accused the boy before the authorities of a crime which he had not committed, and he was put in prison for six years. Six years makes a difference in the life of a boy, and when Tchakegie came out of prison he was a young man with a settled purpose. He went to find the officer who shot his father, and having found him he shot him dead, and then he fled to the mountains and turned brigand. Yes! what else could he do? He is not old now, only twenty-eight or thirty. But he is not like other brigands. His life has not made him bloodthirsty, and he is not greedy. Other brigands will sometimes take the ransom and then kill the people. Yes! and they do worse things to women and children, and they cut off people's fingers and toes and send them to the people's friends and relations. They do that out of spite. Tchakegie is not like that; you might almost think that he is sorry to be a brigand at all, though he is so rich and has so much power. For every governor in this country is afraid of him since he is 'The Justice of the Mountains.' They know what will happen to them if they go too far in their ways and Tchakegie gets to hear about it.

"I will tell you a story about him. There are many like it, for he is very good to the poor. Once there were some poor people who worked very hard on their farm. They had a daughter—only that daughter—and she was a very pretty girl. Well, there was a

brigand, and he wanted to have her. So he came with his men and took her away. Now, Tchakegie knew this old man, and as he chanced to ride that way, he stopped at the farm to rest himself; and he found the old man and his wife quite crazy. When he made out what it was that made them so crazy, he said, 'Don't worry any more. You shall have your daughter to-morrow—all safe.' So he rode away. The brigands meantime had got to their house and set down the girl, and she sat in a corner and was very frightened. While they sat round a table drinking mastic, all of a sudden Tchakegie came in. And they said to him, 'Sit down,' and he said, 'I will not sit down. What is that girl doing there?' 'Oh!' they said, 'that is only a girl, never mind her—sit down.' 'I will not sit down,' said Tchakegie, 'while that girl is there. She must go to her own place.' Then he blew his whistle, and before these brigands could move, Tchakegie's men were in the room. And Tchakegie shot the chief brigand dead himself, and some more of the others were shot too. That was to teach brigands not to do such things. Then he took the girl and brought her safely to her parents as he promised he would do. This he did to teach brigands not to do such things.

"You see now the thing which makes it difficult to catch Tchakegie. If we lost him, things would be very much worse. The peasants know that, and they like him much, much better than the officials. If we had not Tchakegie, it is difficult to know who would keep the officials in order. Then, if he meets a man who is poor and can't get along because he wants a little money loaned to him, Tchakegie gives him the money, and does not mind if he never gets paid. He helps them besides in many ways that the officials will not do. Just lately he has made a bridge and repaired a road, because every

year many poor people were drowned there, and they could not get their produce to the market. Tchakegie paid a man 400*l.* to build a bridge. Since then Tchakegie has heard that the man cheated him and spent only 200*l.*, which may be because he does not understand those things. Now he is looking for that man to take 200*l.* off him.

"But the cleverest thing he ever did happened the other day, and that is why you will see how busy they are now trying to catch him. Yes! The soldiers are being sent up from Smyrna, and one was so frightened that he had apoplexy and died before he started.

"How can they catch him when he knows every turn in the mountains, and when many people would conceal him? Then he can shoot very well, and some of them cannot shoot at all. But this last thing he did exceeds all the rest. He went into a house in the middle of a town in broad daylight, and walked out again with seven or eight thousand pounds. It was the feast at the end of Ramadan, and he went into the town dressed as an Imâm. He went to the house of a very rich man who was a miser, and the servants opened the door to him because he was dressed as an Imâm; for it is the custom that Imâms go to the houses of the rich—especially the very rich—to pray there in the morning of the feast, and they get paid for doing it. So the servants thought Tchakegie was the Imâm who had come to pray. The master of the house was out. He had gone to the mosque to say his prayers. So the Imâm—that was Tchakegie—went in to wait for him. When the man came back to his house Tchakegie opened the door to him and said, 'Do you know me? I am Tchakegie. Give me now your money, or I'll have your life,' and he drew out a revolver.

"The man was terribly frightened. He had a great deal of money. Tcha-

kegie opened the door to one of his own men, while Tchakegie himself went with the man to the safe to fetch the money. There was much gold and a great deal of silver. Tchakegie took for himself all the gold, about six thousand pounds. The silver he gave to the five men who were with him, who were admitted one by one. Then they went away. It was market-day in the town, and no one took special notice of the strange Imâm who walked through the market alone, and went out of the town into the country through the same gate with many of the country people who were returning home.

"What happened to the man is the question. Perhaps he was too dazed to take action. Anyhow, when he did arrive at the Konak half an hour afterwards to give information, he was so incoherent, and the tale he told was so strange, that the officials did not know what to make of it."

This was the tobacco trader's story of Tchakegie, the renowned brigand—the modern Robin Hood—"The Justice of the Mountains," in Asia Minor. Later on—it was as he foretold—a great stir was made to catch Tchakegie, and I saw the troops who were sent up from Smyrna. The Vali also came himself. The soldiers went into the mountains and arrived at a house where Tchakegie or some of his men were said to be. A dispute arose as to what should be done, whether the house should be taken in the darkness by assault, or whether they should wait till daylight. The dispute dragged on till morning, and with the morning came Tchakegie. As soon as the news reached the soldiers there was a stampede. Some forty men were killed or wounded by Tchakegie himself, as in their hurry to escape they took the nearest path—a narrow mountain track—at the bottom of which he was waiting for them with his rifle.

The account of this defeat of the soldiers was given me in our logia, and the narrator wound up by remarking—

"I wonder if the Vall can do anything! They say that Tchakegie carries a talisman with him which prevents his being shot."

"That is so," remarked Hadja, who sat on the floor before the brazier engaged in her favorite occupation of making coffee—"that is so, for we know that if a bullet strikes his flesh it falls to the ground."

Whether this be true or not the reader must decide for himself. At all events the greater part of the stories told me of Tchakegie were, I believe,

Longman's Magazine.

substantially so, and no doubt he is in many respects a remarkable character. A better government would provide a career for such a man. Instead of living in his mountain stronghold breathing defiance and executing vengeance upon corrupt and venial officials, he might be fighting his country's battles, or helping to carry out some greatly needed scheme of roads or irrigation.

At all events his character and life as sketched to me suggested the fact that Turkey can produce men of mettle, with rude ideals of justice, by no means devoid of heroism.

Frances MacNab.

PROFESSOR MOMMSEN.

At his death Professor Mommsen occupied a unique position in contemporary Europe. By common consent he was the foremost scholar, both by virtue of the extent and variety of his attainments, and the extraordinary literary value of one or two of his works. He was also the accepted *savant* of the German people, the tutelary intellectual genius of his country. For many years it had been his business to expound German ideals and to give voice to racial ambitions. His verdict on any question, whether of the day or of all time, was accepted by the large proportion of his countrymen. He may rank with Savigny as one of the greatest of academic lawyers, who have brought into the sphere of legal maxims a constructive historical spirit, and shown us the great edifice rising out of the swamps of primitive society. The *Corpus Inscriptionum Latinarum* for which he was chiefly responsible laid the foundation of a scientific study of the most important of original authorities, and classical epigraphy

owes more to him than to any modern scholar. But his great achievement is to be found in the work which he wrote less for the student than for the ordinary reader. He wrote the history of Rome, not as a mosaic of painfully deciphered facts, but as a story of living men, a drama of the rise of one of the greatest of human peoples. Only a laborious scholar can know what a deep foundation of scholarship underlies the vivid narrative; but the most prosaic of men can feel in the tale something of an epic magnificence. Mommsen carried the same vitality into his politics. An enthusiastic Liberal from the first, and a strenuous opponent of Bismarck, he remained to the end a keen critic of policies and politicians. Whatever our verdict on his work, all must feel that a great figure has departed from the world.

Being a man before he was a scholar, he carried into scholarship a profound sense of the importance of the man of action. Like Freeman, he always insisted upon the unity of history, and

refused to change his attitude towards the protagonists merely because they had been two thousand years in their graves. He was as keenly interested, and, let it be said, as violent a partisan, in the quarrels of Sullans and Marians as he was in the debates of the Reichstag. For him there was no distinction in nature between 1805 and B.C. 90. Hence we never find in him the severely balanced judgments and the scrupulous impartiality of calmer historians. He wrote his history with certain fixed presuppositions in his mind, but happily they are so very clear on every page that the student can detect them and allow for them. In the first place, he was a democrat, rejoicing in the strength of the people, and when he found a man capable of leading the masses, ready to fall down and worship him. But the democracy must be a militant one. The ineffective philanthropist gets from him nothing but contempt. It is the strong man, the Cæsar or Napoleon, who can discern the power of the "body-guard from the pavement," and use it to shatter effete institutions, who commands his admiration. That Teutonic characteristic, which is found in different degrees in such very opposite people as Bismarck and Nietzsche, is very strong in this historian's mind. He believes in and preaches the gospel of strength, and the strong unjust man seems to him more worth having than a century of the ineffectual good. Hence his democracy is a fighting force, and only one step removed from a tyranny. For constitutional fictions and beliefs which have outlived their usefulness he has a complete scorn, and the upholders of an old régime rarely get justice at his hands. It cannot be said that he has stated the Senatorial case fairly, or done that justice to the old Republicans which he has done so amply to the iconoclasts. Liberal though he calls him-

self, his sympathies are far more with Sulla than with the Gracchi, who discovered a truth which they had not the courage to develop logically; with Catiline and "those terrible energies, the wicked," than with Cicero and academic virtue. No one can forget that portrait of Cicero, which, bitten in with vitriolic energy, has so biased the world that there seems small chance of that excellent man of letters getting justice for many a day. But it is in his account of Cæsar that Mommsen's imagination carries him to the plane of creative literature. In the main it is no doubt correct, though for some of his more sensational theories, such as the motive with which Cæsar undertook the Gallic Wars, there seems scanty warrant from the authorities. The great epic of the career of the aristocrat, who passes from a negative iconoclasm to a profoundly constructive policy, and at last lays down his life as the seal on the task he has finished, has never been surpassed by any historian. Mommsen had always a good deal of the dramatist's art, and the way in which the narrative leads up to the climax, the crossing of the Rubicon, is moving drama as well as great history.

But if he so carried his politics into his history that he seems to give his narrative a contemporary interest, there was a reflex action, and he imported from his history certain principles which determined his attitude to questions of his own day. His conception of civic freedom was rather Roman than modern. For the cast-off rags of feudalism and clericalism he had nothing but contempt, but in discarding one set of bonds he imposed another. He was at all times a thorough-going Individualist. He detested slavery, and the war between North and South in America seemed to him a holy crusade. But his conception of freedom, like that of most Individualists, was nar-

row and abstract; and he was prepared to submit to other bonds. He was nominally opposed to the doctrine of Imperialism, but in practice he was an enthusiast for the domination of his own Teutonic race. His nationalism was strong enough to make him a violent critic of the policy of other peoples, as in his ill-judged comments on the Boer War, but it was a nationalism quite inconsistent with itself. The old democratic cult of the "strong man" is always somewhere in the back of his mind. The people are the only source of power and of political wisdom, so ran his creed; but they must be led, and their leader should tolerate no malcontents. He was so like Bismarck that we need not wonder that he quarrelled with him. The truth is that no Conservatism is so unshakeable as a certain kind of Liberalism which professes a small number of Liberal dog-

The Spectator.

mas, but is by temperament bureaucratic and absolutist. To Mommsen the Hague Convention was merely a misprint in history, Socialism a dangerous heresy, and popular liberties an uncertain growth which should be blessed but also jealously curtailed. His honesty and political courage were always remarkable, and were so recognized by his countrymen that towards the end of his life he was granted a kind of indulgence for free speech, and held a position of whimsical independence. But the net result of his teaching seems to us to have been the riveting of militarist and bureaucratic shackles upon his compatriots, and the encouragement of every grandiose racial ambition. Like the Republican Whigs of the eighteenth century, he showed how reaction can masquerade in the cap of liberty.

BOOKS AND AUTHORS.

It is reported that Mr. Herbert Spencer will receive the Nobel prize of \$40,000 in literature.

Widespread regret will be occasioned in this country as well as in England by The Athenæum's announcement that Sir Leslie Stephen is in a state of health which gives his friends uneasiness.

E. P. Dutton & Co. are the American publishers of a new library edition of "The High History of the Holy Grail," translated from the old French by Sebastian Evans, LL. D., and decorated with more than twenty full-page drawings, by Jessie M. King. This is, we believe, the first edition in English, in a volume suited to the library, of this quaint history, in its complete, thir-

teenth-century form. Miss King's drawings are dainty and fanciful.

Hamilton Wright Mabee's "In Arcady" is a kind of prose poem, in which the joy and mystery of life and of Nature, the memories of an earlier mythology, and imaginings that are pure fantasy are curiously blended, with a lulling and dreamy effect. The style is almost as decorative as the lofty tree-trunks in which the pages are framed; and there are four full-page imaginative drawings by Will H. Low. Dodd, Mead & Co.

The recent death of Hugh Stowell Scott, better known by his pen name of "Henry Seton Merriman" will be widely deplored by the lovers of clean and spirited historical fiction. One of

the earliest of his stories to attract attention was "In Kedar's Tents," which appeared serially in *The Living Age*. His latest story, "Barlasch of the Guard," is published in this country by McClure, Phillips & Co., and was recently noticed in these pages.

An up-to-date girl graduate, with up-to-date views of "woman's sphere," and a college professor some twenty years her senior, of congenial tastes but opposing convictions, are the heroine and hero of Eliza Orne White's new novel, "Lesley Chilton." Meeting first in a tilt of pens in a magazine discussion, they encounter each other face to face with quite different results during an idyllic summer at Mount Desert, but it needs more than one winter of philanthropic and social activity for her, and class-room and platform work for him, to prepare them for the dénouement which the sagacious reader has felt inevitable from the first. The plot offers its author many opportunities for that satire of current fads—especially Boston fads—which her readers find so enjoyable, and she has taken advantage of them very cleverly. Houghton, Mifflin & Co.

"The Literary Guillotine" (John Lane) is a delightful bit of fooling. It reports the proceedings of "The Literary Emergency Court" before which are brought for trial certain authors "whom literature would be better off without." To these assizes are haled Richard Harding Davis, for the introduction of veiled improprieties into his stories; Mary Baker G. Eddy for the infringement of a patent obscure sentence of Henry James; John Kendrick Bangs and James Brander Matthews for the larceny of jokes; Mrs. Ward "for the commission of 'Eleanor' and other crimes"; Marie Corelli and Hall Caine, who are arraigned for similar offences, but are inclined to turn state's evidence against each other; and sun-

dry other offenders. The satire is well directed, but it has no tinge of malice; and the book is a distinct addition to the gayety of the season.

T. Y. Crowell & Co. publish "The Comedie of Errors" as the third volume of their "First Folio" edition of Shakespeare's plays. The convenient form, exquisite typography and careful annotation of this edition would make it noteworthy, if it possessed no other attractions. But when it is remembered that the edition follows closely the rare first folio text, with the single change of the substitution of modern typography, it will be perceived that it has a peculiar value to students of Shakespeare, and may well be desired by those who possess other editions, as a supplement to them. Charlotte Porter and Helen A. Clarke, who edited the "Camberwell" Browning are the editors. A useful feature of the volume is the grouping of selected criticisms upon the play.

Mr. Ernest W. Clement's "A Handbook of Modern Japan" (A. C. McClurg & Co.) is at once the freshest and one of the most valuable of recent volumes upon the Mikado's empire. We have here not the superficial observations of a traveller, nor the fine writing of one who is more concerned over form than over substance; but a direct, well-proportioned, illuminating description of Japan and the Japanese of to-day, considered socially, religiously, politically, commercially. It is a compendium of facts, not so voluminous as to be burdensome, but informing and suggestive, and each chapter is followed with a bibliography, which guides the reader to further sources of information if he is disposed to seek them. There are numerous illustrations and an excellent map, and an appendix gives the text of treaties, and up-to-date statistics concerning the Japanese army and navy and mercantile marine.

A SONG OF QUEEN AVERLAINE
IN OLD AGE.

I have grown old in waiting spring's
return,
And now spring comes, I stand like
winter gray
In a young world; yet warm within me
burn
The morning-fires Love kindled in
youth's day.

I have grown old; the young folk look
on me
With sighs, and wonder that I once
was fair;
And whisper one another, "Is this she?
Did summer ever light that winter
hair?"

"Ah, she is old; yet she too once was
young;
Yea, loved as we loved even, for men
tell
How bright her beauty burned on
every tongue,
And how a knightly stranger loved
her well.

"Yet Love grows old that beats so
young and warm;
His leaping fires in dust and ashes
fail;
Shall we, too, wither in the winter
storm,
And wander thus, one April, old and
frail?"

Love grows not old, O lovers, though
youth die,
And bodily beauty perish as the
flower;
Though all things fall; though spring
and summer fly
Love's fire burns dauntless till the
last dark hour.

Wilfrid Wilson Gibson.

The Pilot.

THE GRAVE OF BURNS.

What woos the world to yonder shrine?
What sacred clay, what dust divine?
Was this some Master faultless-fine,
In whom we praise
The cunning of the jewelled line
And carven phrase?

A searcher of our source and goal,
A reader of God's secret scroll?
A Shakespeare, flashing o'er the whole
Of man's domain
The splendor of his cloudless soul
And perfect brain?

Nay, none of these,—and little skilled
On heavenly heights to sing and build!
Thine, thine, O Earth, whose fields he
tilled,
And thine alone,
Was he whose fiery heart lies stilled
'Neath yonder stone.

He came when poets had forgot
How rich and strange the human lot;
How warm the tints of life; how hot
Are Love and Hate,
And what makes Truth divine, and
what
Makes Manhood great.

For, 'mid an age of dust and dearth,
Once more had bloomed immortal
worth,
There, in the strong splenetic North,
The Spring began.
A mighty mother had brought forth
A mighty man.

No mystic torch through time he bore,
No virgin veil from Life he tore;
His soul no bright insignia wore
Of starry birth;
He saw what all men see—no more—
In heaven and earth:

But as, when thunder crashes nigh,
All darkness opes one flaming eye,
And the world leaps against the sky,—
So fiery-clear
Did the old truths that we pass by
To him appear.

How could he scape the doom of such
As feel the airiest phantom-touch
Keenlier than others feel the clutch
Of iron powers,—
Who die of having lived so much
In their large hours?

He erred, he sinned: and if there be
Who, from his hapless frailties free,
Rich in the poorer virtues, see
His faults alone,—
To such, O Lord of Charity,
Be mercy shown!

William Watson.